

NORTH SHORE SUSTAINABLE COMMUNITIES PLAN



DEPARTMENT OF PLANNING AND PERMITTING CITY AND COUNTY OF HONOLULU

JULY 2000

While every attempt has been made to assure the accuracy of the information presented in these files, they are not the official version of the plan as filed with the Office of the City Clerk, City and County of Honolulu, 530 South King Street, Honolulu, Hawaii 96813, phone (808) 523-4480.



I am pleased to present the North Shore Sustainable Communities Plan. It provides conceptual, long-range visions and policies to guide our land use and infrastructure decisions for a region which stretches from Kaena Point to Waialee Gulch.

The Plan seeks to retain the North Shore's unique qualities and rural character in meeting community needs. To this end, it emphasizes retention of the region's scenic open spaces, coastal resources, and elements of the community's cultural and plantation heritage. Some of its measures for accomplishing this include geographic boundaries and policies which support the role of diversified agriculture in sustaining the North Shore's open space setting, and which focus growth and commercial activity on the towns of Haleiwa and Waialua while retaining their historic and "country town" character.

This Plan represents a significant achievement in our continuing effort to streamline government processes, eliminating reviews that duplicated the zone change approval procedures.

The North Shore Sustainable
Communities Plan was successfully
developed through a process which
involved all sectors of the community.
With the adoption of this plan, it is my
hope that we will continue to work
together, to make the Plan's vision for
this unique area along Oahu's north
shore a reality.

JEREMY HARRIS, Mayor

ORDINANCE	00-	15

BILL 71_(1999), CD2

A BILL FOR AN ORDINANCE

TO ADOPT THE SUSTAINABLE COMMUNITIES PLAN FOR THE NORTH SHORE OF THE CITY AND COUNTY OF HONOLULU.

BE IT ORDAINED by the People of the City and County of Honolulu:

SECTION 1. Purpose and Intent. This ordinance is intended to bring the North Shore Sustainable Communities Plan into compliance with Section 6-909 of the Revised Charter of the City and County of Honolulu 1973, as amended, which sets forth the requirement that "Development plans shall consist of conceptual schemes for implementing and accomplishing the development objectives and policies of the general plan within the city.... The development plans and maps (which shall not be detailed in the manner of zoning maps) shall describe the desired urban character and the significant natural, scenic and cultural resources for the several parts of the city to a degree which is sufficient to serve as a policy guide for more detailed zoning maps and regulations and public and private sector investment decisions."

The North Shore Sustainable Communities Plan has been prepared in accordance with the charter-prescribed requirements for development plans and is to be accorded force and effect as such for all charter- and ordinance-prescribed purposes.

This ordinance adopts the North Shore Sustainable Communities Plan that presents a vision for North Shore's future development consisting of policies, guidelines and conceptual schemes that will serve as a policy guide for more detailed zoning maps and regulations and for public and private sector investment decisions.

This ordinance is enacted pursuant to the powers vested in the City and County of Honolulu by Chapter 46, and Section 226-58, Hawaii Revised Statutes.

SECTION 2. Article 8 of Chapter 24, Revised Ordinances of Honolulu 1990, as amended ("North Shore"), is repealed.

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SECTION 3. Chapter 24, Revised Ordinances of Honolulu 1990, as amended, is amended by adding a new Article 8 to read as follows:

"Article 8. North Shore

Sec. 24-8.1 Definitions.

Unless the context otherwise requires, the definitions contained in this section shall govern the construction of this article and the North Shore Sustainable Communities Plan.

"Charter" or "Revised Charter" means the Revised Charter of the City and County of Honolulu 1973, as amended.

"City" means the City and County of Honolulu.

"Council" means the city council of the City and County of Honolulu.

"County" means the City and County of Honolulu.

"Department" or "department of planning and permitting" means the department of planning and permitting of the City and County of Honolulu.

"Development" means any public improvement project, or any public or private project requiring a zoning map amendment.

"Development plan" or "sustainable communities plan" means a plan document for a given geographic area which consists of conceptual schemes for implementing and accomplishing the development objectives and policies of the general plan for the several parts of the City and County of Honolulu.

"Director" means the director of the department of planning and permitting.

"Environmental assessment" and "EA" mean a written evaluation prepared in compliance with the environmental quality commission's procedural rules and regulations implementing HRS Chapter 343 to determine whether an action may have a significant environmental effect.

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"Environmental impact statement" and "EIS" mean an informational document prepared in compliance with the environmental quality commission's procedural rules and regulations implementing HRS Chapter 343; and which discloses the environmental effects of a proposed action, effects of a proposed action on the economic and social welfare of the community and state, effects of the economic activities arising out of the proposed action, measures proposed to minimize adverse effects, and alternatives to the action and their environmental effects.

"Finding of no significant impact" and "FONSI" mean a determination based on an environmental assessment that the subject action will not have a significant effect and, therefore, will not require the preparation of an environmental impact statement.

"Functional plan" means the public facility and infrastructure plans prepared by public agencies to further implement the vision, policies, principles, and guidelines set forth in the North Shore Sustainable Communities Plan.

"General plan" means the general plan of the City and County of Honolulu as defined by Section 6-908 of the charter.

"Hawaii Revised Statutes" or "HRS" means Hawaii Revised Statutes, as amended.

"Planning commission" means the planning commission of the City and County of Honolulu.

"Project master plan" means a conceptual plan that covers all phases of a development project. The project master plan shall be that portion of an EA or EIS which illustrates and describes how the project conforms to the vision for North Shore, and the relevant policies, principles, and guidelines for the site, the surrounding lands, and the region.

"Revised Ordinances of Honolulu" or "ROH" means Revised Ordinances of Honolulu 1990, as amended.

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"Significant zone change" means a zone change which involves at least one of the following:

- (1) Any change in zoning of 10 or more acres of land to any zoning district or combination of zoning districts, excluding preservation or agricultural zoning districts; or
- (2) Any change in zoning of more than five acres to an apartment, resort, commercial, industrial or mixed use zoning district; or
- (3) Any development which would have a major social, environmental, or policy impact, or major cumulative impacts due to a series of applications in the same area.

"Unilateral agreement" means a conditional zoning agreement made pursuant to the city's Land Use Ordinance as part of the process of enactment of an ordinance for a zone change that imposes conditions on a landowner's or developer's use of the property.

Sec. 24-8.2 Applicability and intent.

- (a) The North Shore Sustainable Communities Plan area extends from Kaena Point to Waialee Gulch near Kawela Bay, and from the shoreline to the slopes of the northerly ends of Waianae and Koolauloa mountain ranges.
- (b) It is the intent of the North Shore Sustainable Communities Plan to provide a guide for orderly and coordinated public and private sector development in a manner that is consistent with applicable general plan provisions, including the designation of North Shore as a rural area where growth will be managed so that "an undesirable spreading of development is prevented."
- (c) The provisions of this article and the North Shore Sustainable Communities Plan are not regulatory. Rather, they are established with the explicit intent of providing a coherent vision to guide resource protection and land use within North Shore. This article shall guide any

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development for North Shore, public investment in infrastructure, zoning and other regulatory procedures, and the preparation of the city's annual capital improvement program budget.

Sec. 24-8.3 Adoption of the North Shore Sustainable Communities Plan.

- (a) This article is adopted pursuant to Revised Charter Section 6-909 and provides a self-contained sustainable communities plan document for North Shore. Upon enactment of this article, all proposed developments will be evaluated against how well they fulfill the vision for North Shore enunciated in the North Shore Sustainable Communities Plan and how closely they meet the policies, principles, and guidelines selected to implement that vision.
- (b) The plan entitled "North Shore Sustainable Communities Plan," attached as an exhibit to this ordinance, is hereby adopted by reference and made part of this article.
- (c) Chapter 24, Article 1, entitled "Development Plan Common Provisions," in its entirety is no longer applicable to the North Shore plan area. The North Shore Sustainable Communities Plan, as adopted by reference by this ordinance, supersedes any and all common provisions previously applicable to the North Shore area.
- (d) Ordinance No. 83-10, entitled, "Article 8, North Shore:
 Part I Development Plan Special Provisions for North Shore,"
 and "Part II Development Plan Maps (Land Use and Public
 Facilities Maps) for North Shore," as amended, is hereby
 repealed in its entirety.
- (e) Notwithstanding Section 2 of this ordinance and subsection (d) of this section:
 - (1) Those provisions of Chapter 24, Article 1, relating to Development Plan Public Facilities Maps;
 - (2) Those provisions of Ordinance 83-10, as amended, relating to the Development Plan Public Facilities Map for North Shore; and



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(3) The Development Plan Public Facilities Map for North Shore, as amended;

shall remain in force and effect until such time as the Public Infrastructure Map for North Shore is adopted in accordance with the provisions of Chapter 4, Article 8.

Sec. 24-8.4 Existing zoning and subdivision ordinances.

- (a) All existing subdivisions and zoning approved prior to the effective date of this ordinance for projects, including but not limited to those subject to unilateral agreements, shall continue to remain in effect following the effective date of this ordinance.
- (b) Subdivision and zoning ordinances applicable to the North Shore Sustainable Communities Plan area enacted prior to the effective date of this ordinance shall continue to regulate the use of land within demarcated zones of the North Shore Sustainable Communities Plan area until such time as the subdivision and zoning ordinances may be amended to be consistent with the North Shore Sustainable Communities Plan.
- (c) Notwithstanding adoption of the North Shore Sustainable Communities Plan, applications for subdivision actions and land use permits accepted by the department for processing prior to the effective date of this ordinance shall continue to be subject only to applicable ordinances and rules and regulations in effect at the time the application is accepted for processing.

Sec. 24-8.5 Consistency.

(a) The performance of prescribed powers, duties and functions by all city agencies shall conform to and implement the policies and provisions of this article and the North Shore Sustainable Communities Plan. Pursuant to Revised Charter Section 6-911.3, public improvement projects and subdivision and zoning ordinances shall be consistent with the North Shore Sustainable Communities Plan.



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(b) Any questions of interpretation regarding the consistency of a proposed development with the provisions of the North Shore Sustainable Communities Plan and the objectives and policies of the general plan shall ultimately be resolved by the council.

- (c) In determining whether a proposed development is consistent with the North Shore Sustainable Communities Plan, the responsible agency shall primarily take into consideration the extent to which the development is consistent with the vision, policies, principles, and guidelines set forth in the North Shore Sustainable Communities Plan.
- (d) Whenever there is a question regarding consistency between existing subdivision or zoning ordinances, including any unilateral agreements, and the North Shore Sustainable Communities Plan, the existing subdivision or zoning ordinances shall prevail until such time as they may be amended to be consistent with the North Shore Sustainable Communities Plan.

Sec. 24-8.6 Implementation.

Implementation of this article relating to the North Shore Sustainable Communities Plan will be accomplished by the following:

- (a) Initiating zoning map and development code amendments to achieve consistency with the policies, principles, and guidelines of the North Shore Sustainable Communities Plan;
- (b) Guiding public investment in infrastructure through functional plans which support the vision of the North Shore Sustainable Communities Plan;
- (c) Recommending approval, approval with modifications or denial of developments seeking zoning and other development approvals based on how well they support the vision of the North Shore Sustainable Communities Plan;

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(d) Incorporating North Shore Sustainable Communities Plan priorities through the Public Infrastructure Map and the city's annual budget process; and

- (e) Evaluating progress in achieving the vision of the North Shore Sustainable Communities Plan periodically and presenting the results of the evaluation in the biennial report which is required by Revised Charter Section 6-910.4; and
- (f) Reviewing the vision of the North Shore Sustainable Communities Plan every five years and revising, as necessary, on the basis of that review, the policies, guidelines, and capital improvement program investments therein.

Sec. 24-8.7 Zoning change applications.

- (a) All zone change applications relating to land in the North Shore Sustainable Communities Plan area will be reviewed by the department for consistency with the general plan, the North Shore Sustainable Communities Plan, and any applicable special area plan.
 - (1) The director will recommend either approval, approval with changes, or denial. The director's written review of the application shall become part of the zone change report which will be sent to the planning commission and the city council.
 - (2) A project master plan shall be a part of an EA or EIS for any project involving 10 acres or more of land. The director shall review the project master plan for its consistency with the North Shore Sustainable Communities Plan.
 - (3) Any development or phase of a development already covered by a project master plan which has been fully reviewed under the provisions of this article shall not require a new project master plan, provided the director determines that the proposed zone change is generally consistent with the existing project master plan for the affected area.



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(4) If a final EIS has already been accepted for a development, including one accepted prior to the effective date of this ordinance, then a subsequent project master plan shall not be required for the development.

- (b) For projects which involve a significant zone change, an environmental assessment shall be submitted to the department of planning and permitting. Any development or phase of a development which has already been assessed under the National Environmental Policy Act, HRS Chapter 343, ROH Chapter 25 or the provisions of this article, and for which a FONSI has been filed or a required EIS has been accepted, shall not be subject to further EA or EIS requirements under this chapter.
- (c) The environmental assessment will be reviewed by the department. Based on review of the environmental assessment, the director will determine whether an environmental impact statement will be required or whether a FONSI should be issued.
- (d) Zone changes shall be processed in accordance with this section, Section 5.5 of the North Shore Sustainable Communities Plan, and ROH Chapter 21.

Sec. 24-8.8 Review of development and other applications.

The review of applications for zone changes and other development approvals will be guided by the vision of the North Shore Sustainable Communities Plan. Decisions on all proposed developments shall be based on the extent to which the project enabled by the development approval supports the policies, principles, and guidelines of the North Shore Sustainable Communities Plan.

The director may review other applications for improvements to land to help the responsible agency determine whether a proposed improvement supports the policies, principles, and guidelines of the North Shore Sustainable Communities Plan.

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Sec. 24-8.9 Annual capital improvement program review.

Annually, the director shall work jointly with the director of budget and fiscal services and the applicable city agencies to review all projects in the city's capital improvement program and budget for compliance and consistency with the general plan, the North Shore Sustainable Communities Plan and other development and sustainable communities plans, any applicable special area plans, and appropriate functional plans. The director will prepare a written report of findings.

Sec. 24-8.10 Five-year review.

- (a) The department shall conduct a comprehensive review of the North Shore Sustainable Communities Plan every five years subsequent to the effective date of this ordinance and shall report its findings and recommended revisions to the city council.
- (b) The North Shore Sustainable Communities Plan will be evaluated to assess the appropriateness of the plan's regional vision, policies, design principles and guidelines, and implementing actions, as well as its consistency with the general plan.
- (c) Nothing in this section shall be construed as prohibiting the processing of a revision to the North Shore Sustainable Communities Plan in accordance with the charter.

Sec. 24-8.11 Biennial report.

In addition to meeting the requirements of Revised Charter Section 6-910.4, the department of planning and permitting's biennial report shall also address the county's achievements and progress in fulfilling the vision of the North Shore Sustainable Communities Plan.



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Sec. 24-8.12 Authority.

Nothing in this article shall be construed as an abridgement or delegation of the responsibility of the director, or of the inherent legislative power of the city council, to review or revise the North Shore Sustainable Communities Plan pursuant to the charter and the above procedures.

Sec. 24-8.13 Severability.

If any provision of this article or the application thereof to any person or property or circumstances is held invalid, such invalidity shall not affect other provisions or applications of this article which can be given effect without the invalid provision or application, and to this end the provisions of this article are declared to be severable.

Sec. 24-8.14 Conflicting provisions.

Any provision contained in this article shall, with respect to the North Shore *Sustainable* Communities Plan area, prevail should there be any conflict with the common provisions or any other provisions under ROH Chapter 24."

SECTION 4. Effective Date of the North Shore Sustainable Communities Plan. The City Clerk is hereby directed to date the North Shore Sustainable Communities Plan attached to this ordinance at the time of its enactment with the effective date of this ordinance.

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SECTION 5. This ordinance shall take effect 60 days after its approval.

	INTRODUCED BY:
	Jon Yoshimura (BR)
DATE OF INTRODUCTION:	
September 8, 1999	
Honolulu, Hawaii	Councilmembers
APPROVED AS TO FORM AND LEGAL	ITY:
Jan & Shore	
Deputy Corporation Counsel	
APPROVED this Whay of	May 2000.
JEREMY HARRIS Mayor City and County of Honolulu	

(OCS/040400/mg)

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PREFACE

The North Shore *Sustainable* Communities Plan has been prepared in accordance with the Charter-prescribed requirements for development plans and is to be accorded force and effect as such for all Charter- and ordinance-prescribed purposes. It is one of eight community-oriented plans intended to help guide public policy, investment, and decisionmaking through the 2020 planning horizon. Each of these plans addresses one of eight geographic planning regions on Oahu, as shown in Exhibit P.1, responding to specific conditions and community values of each region.

Two of the eight planning regions, Ewa and the Primary Urban Center, are the areas to which major growth in population and economic activity will be directed over the next 20 years and beyond. The plans for these regions will continue to be titled "Development Plans," and will serve as the policy guides for development decisions and actions needed to support that growth.

The remaining six planning regions, including North Shore, are envisioned to remain relatively stable. The plans for these regions have been titled "Sustainable Community Plans" and are focused on serving as policy guidelines in support of that goal. Its vision statement and supporting provisions are oriented toward maintaining and enhancing the region's ability to sustain its rural character and lifestyle.

P.1 THE SUSTAINABLE COMMUNITIES PLAN PROCESS

This document is the culmination of a planning effort led by the City and County of Honolulu's Planning Department and its successor agency, the Department of Planning and Permitting. This effort comprised a process that encouraged and enabled significant involvement from the region's neighborhood boards, community associations, groups of business leaders, religious and cultural organizations, private landowners, institutions and numerous individuals. In its final form, the plan will have incorporated input received from eight Community Advisory Committee meetings, three community-wide meetings, and many meetings with community leaders and representatives of government agencies.

P.2 HONOLULU LAND USE PLANNING AND MANAGEMENT SYSTEM

The City and County of Honolulu guides and directs land use and growth through a three-tier system of objectives, policies, planning principles, guidelines and regulations. The General Plan forms the first tier of this system. First adopted by resolution in 1977, the General Plan is a relatively brief document, consisting primarily of one-sentence statements of objectives and policies. It has been amended several times, but the basic objectives and policies set forth in the 1977 plan remain intact.

The second tier of the system is formed by the Development Plans, which are adopted and revised by ordinance. These plans address eight geographic regions of the island, including the Primary Urban Center, East Honolulu, Central Oahu, Ewa, Waianae, North Shore, Koolauloa and Koolaupoko. Under the current revision program, the Primary Urban Center and Ewa retain the title "Development Plan." The other regions are now referred to as "Sustainable Community Plans" to reflect their policy intent.

The third tier of the system is composed of the implementing ordinances, including the Land Use Ordinance (Honolulu's zoning code) and the City's Capital Improvement Program. Mandated by the City Charter, these ordinances constitute the principal means for implementing the City's plans. These ordinances are required to be consistent with the General Plan, the Development Plans, and each other.

In addition to these three Charter-mandated tiers, the Development Plans and *Sustainable* Communities Plans are supplemented by two planning mechanisms that are not required by the Charter, including the functional planning process and special area planning. Functional planning activities, some of which are mandated by state or federal regulations, provide long-range guidance for the development of public facilities such as the water system, wastewater disposal, and transportation. Special area plans are intended to give specific guidance for neighborhoods, communities or specialized resources.

P.3 AUTHORITY OF THE DEVELOPMENT PLANS AND SUSTAINABLE COMMUNITIES PLANS

The authority of the Development Plans and *Sustainable* Community Plans is derived from the City Charter, which mandates preparation of a General Plan and Development Plans to guide "the development and improvement of the city." Together with the General Plan, the Development Plans provide a policy context for the land use and budgetary actions of the City. This is the authority the originally adopted Development Plans carried, and it remains unchanged in the revised Plan presented in this document.

The Charter provides that "public improvement projects and subdivision and zoning ordinances shall be consistent with the development plan for that area." Although the Development Plans and *Sustainable* Communities Plans are not themselves regulatory, they "regulate the regulators." They are policy tools and are to be used, in conjunction with the programs and budgets of the City, to accomplish the objectives of the City and as guides for the decisions made in the private sector.

P.4 WHY THE DEVELOPMENT PLANS HAVE BEEN REVISED

In 1992 the City Charter Commission recommended, and the voters of Honolulu adopted, amendments to the City Charter. Chief among its findings, the Charter Commission concluded that the Development Plans were overly detailed and had created processes that duplicated the zoning process. To eliminate this unnecessary duplication, the 1992 Charter

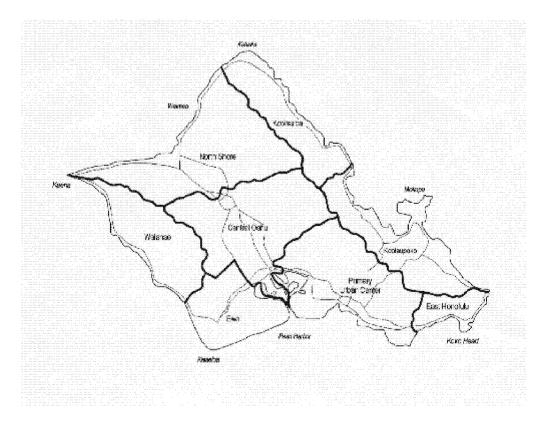
amendments changed the definition of Development Plans from "relatively detailed plans" to "conceptual schemes."

The 1992 Charter amendments established that the purpose of the Development Plan is to provide:

- "priorities ... (for the) coordination of major development activities"; and
- sufficient description of the "desired urban character and the significant natural, scenic and cultural resources ... to serve as a policy guide for more detailed zoning maps and regulations and public and private sector investment decisions."

In response to the 1992 Charter amendments, the Planning Department launched a thorough review of the Development Plans. The goal of that review was the revision of all eight of the Development Plans to bring them into conformance with the Charter-mandated conceptual orientation. The revised plan presented in this document conforms to that mandate.

Exhibit P.1
Development Plan and Sustainable Communities Plan Areas for Oahu



EXECUTIVE SUMMARY

The North Shore *Sustainable* Communities Plan, which is incorporated into Ordinance 00-15 by reference, is organized in five chapters and an appendix, as follows:

- Chapter 1: North Shore's Role in Oahu's Development Pattern defines the region's role and identity within the overall framework of islandwide planning and land use management.
- Chapter 2: The Vision for North Shore's Future summarizes the vision for the future of the region and lists important elements of that vision.
- Chapter 3: Land Use Policies, Principles, and Guidelines presents the Plan's core policies, and provides policy guidance for the region's various land use elements.
- Chapter 4: Public Facilities and Infrastructure Policies and Principles outlines policies, principles, and actions needed to support the land use policies of Chapter 3.
- Chapter 5: Implementation addresses needs for carrying out provisions outlined by the Plan.

The contents of each chapter is briefly summarized below:

E.1 CHAPTER 1: NORTH SHORE'S ROLE IN OAHU'S DEVELOPMENT PATTERN

Consistent with the provisions of the General Plan, the role of the North Shore is to maintain the rural character, agricultural lands, open space, natural environment, recreational resources and scenic beauty of Oahu's northern coast. In line with the General Plan policies to preserve the open space and country atmosphere of the rural areas, growth is limited to "infill" areas within or adjacent to built-up areas to accommodate existing and future housing and employment needs.

E.2 CHAPTER 2: THE VISION FOR THE NORTH SHORE'S FUTURE

The vision focuses on retaining the unique qualities that have defined the region's attractiveness to residents and visitors alike; scenic open spaces, coastal resources, and the community's cultural and plantation heritage. Diversified agriculture, which will include crop production, agricultural production, and other support facilities, will play a key role in sustaining the region's open space setting. Haleiwa and Waialua remain the North Shore's principal commercial and civic centers while retaining their historic and "country town" character. The region will remain "country," with wide open space, vistas, and rural communities. Growth will be limited to Haleiwa and Waialua. Key elements of the vision include:

- Establish Rural Community, Agriculture, and Preservation Boundaries.
- Support the diversified agriculture industry.
- Enhance the region's recreational and educational potential.
- Designate Haleiwa and Waialua towns as "country towns."
- Retain the Waialua Mill site as the regional industrial center.
- Limit additional new housing to areas contiguous to Haleiwa and Waialua towns and establish rural design guidelines.
- Provide adequate public infrastructure, facilities, and services.
- Retain cultural and historic resources.
- Adapt the Ahupua'a concept in land use and natural resource management.

E.3 CHAPTER 3: LAND USE POLICIES, PRINCIPLES, AND GUIDELINES

This chapter presents general policies, planning principles, and guidelines for the major concerns related to land use on the North Shore. General policies related to each land use type are summarized below:

E.3.1 Open Space and Natural Environment

- Incorporate the land use concept and natural resource management principles of "Ahupua'a" into land use and management guidelines to protect and enhance the resources of the region.
- Protect ecologically sensitive areas with provisions for protective buffer zones and setbacks.
- Protect scenic views, preserve open space, and minimize the impacts of new developments and utility improvements on scenic resources.
- Improve accessibility of recreational resources including shoreline and mountain areas.
- Direct new developments to areas within or next to existing developments within the Rural Community Boundary.

E.3.2 Agriculture

- Protect important agricultural lands and support the diversified agriculture industry.
- Concentrate major agricultural support activities at designated areas in Waialua or Kawailoa.
- Discourage conversion of agricultural lands to large-lot residential subdivisions with no agricultural activities.
- Identify, evaluate, and implement economic incentives to promote the diversified agriculture industry.

E.3.3 Parks and Recreation

- Protect and expand recreational resources including beach parks, regional parks, district parks, community parks, and other quasi-public recreational facilities.
- Provide safe, suitable sites and facilities for a variety of recreational activities and expand access to recreational resources in the mountains, at the shoreline and in the ocean.
- Provide an integrated system of pedestrian paths/bikeways linking the parks, schools, and town centers in Haleiwa and Waialua.
- Maintain and improve recreational areas and facilities.
- Promote recreational activities compatible with the preservation of open space, rural character, scenic resources, and environmental quality.

E.3.4 Historic and Cultural Resources

- Preserve significant historic features and emphasize physical references to the region's history and cultural roots to foster the area's unique sense of place.
- Protect existing landmarks and support the creation of new, culturally appropriate landmarks.
- Retain significant vistas associated with archaeological features.
- Respect significant historic resources. Restore or maintain the integrity of sites with cultural and/or religious significance.

E.3.5 Residential Communities

- Provide sufficient capacity within the Rural Community Boundary to accommodate existing and future housing needs.
- Direct future residential development to Haleiwa and Waialua.
- Preserve and protect the rural character and natural features and setting of the region by establishing "rural" forms of development and subdivision standards, in contrast to existing urban standards.
- Encourage creative site and housing design options that maintain the rural character.
- Provide housing, through a variety of living accommodations, for an aging population.

E.3.6 Commercial Areas

- Maintain the rural "small town" character of Haleiwa and Waialua and allow for a compatible mix of commercial, service industrial, and residential uses as well as to recognize and maintain the unique building and streetscape character of these towns.
- Allow for compact, low-rise, small-scale commercial areas, rather than unplanned commercial dispersion or strip development along arterial roads.
- Permit existing country stores to remain and direct new commercial enterprises to the Country Town districts of Haleiwa and Waialua.

E.3.7 Industrial Areas

- Encourage compatible industrial uses that help diversify and revitalize the economic base of the region.
- Encourage uses that are compatible with the rural character of the region, and which have a minimal impact on the natural environment, cultural resources, open spaces, and scenic views.
- Promote industries that provide employment opportunities as well as goods and services for area residents.

E.3.8 Visitor Facilities

- Allow for small-scale visitor facilities that are compatible with the rural character and natural features of the region. These include country inns in Haleiwa and Waialua Country Town districts in appropriate locations.
- Integrate visitor facilities with the social and economic life of the surrounding communities.
- Minimize impacts on resources, infrastructure, or surrounding communities.
- Ensure that facility development should not degrade, deplete, or preclude access to public lands or resources.

E.3.9 Institutional Uses

- Support public facilities that provide convenient public services or functionally support other governmental activities.
- Plan and develop public facilities in a manner consistent with the rural character of the region and surrounding land uses.
- Promote consolidation or co-location of services to provide convenient onestop services in the region.

E.3.10 Military

 Military installations should be developed in a consistent manner with applicable general policies for residential, industrial, commercial, and other related uses.

E.4 CHAPTER 4: PUBLIC FACILITIES AND INFRASTRUCTURE POLICIES AND PRINCIPLES

This chapter presents general policies and planning principles related to public facilities and infrastructure in the North Shore. General policies related to each facility type are summarized below:

E.4.1 Transportation Systems

 Retain Kamehameha Highway as a two-lane thoroughfare and provide roadway improvements to promote pedestrian safety and traffic efficiency.

- Provide adequate access between residences, jobs, shopping, and recreation areas on the North Shore and to adjacent areas.
- Provide more opportunities and support facilities for convenient and safe pedestrian and bicycle travel.
- Promote ride-sharing activities such as car/van pooling. Reduce commute to work with options such as teleworking.
- Include considerations of visitor population in determining allocations of resources and facilities for the North Shore.

E.4.2 Water Systems

- Protect and preserve the streams, wetlands' natural drainage systems, watershed areas and the shoreline and coastal areas.
- Integrate management of all potable and nonpotable water sources, including groundwater, surface water, storm water, and reclaimed water.
- Encourage use of nonpotable water for irrigation of landscaping and agricultural lands to conserve supply of potable water.

E.4.3 Wastewater Treatment

- Provide adequate public or private wastewater treatment facilities and improve the existing wastewater management services.
- Minimize adverse impacts of wastewater treatment systems on potable water sources and the ocean

E.4.4 Electrical Power Development

 Locate utility systems including substations, transmission lines and towers in areas where they will least obstruct important views and avoid or mitigate any potential adverse impacts on scenic and natural resources.

E.4.5 Solid Waste Handling and Disposal

- Establish more efficient waste diversion and collection systems.
- Provide adequate resources for trash removal, clean-up of illegal dumps, and enforcement of antidumping laws.

E.4.6 Drainage Systems

- Improve the drainage system utilizing nonstructural measures to mitigate storm runoff and provide adequate protection from flooding.
- Promote drainage system design, which emphasizes control and minimization of nonpoint source pollution and the retention of storm water on-site and in wetlands

E.4.7 School Facilities

- Approve new residential developments only after the State Department of Education certifies that adequate school facilities will be available when the development is completed.
- Require that developers contribute their fair share towards school development to ensure provision of adequate school facilities for the children living in their developments.

E.4.8 Public Safety Facilities

- Promote an integrated approach to public safety, which enables police, fire, ocean safety, civil defense, and emergency medical efforts to share resources and information, as appropriate.
- Consider visitor populations in allocating public safety resources.
- Provide adequate staffing and facilities to ensure effective and efficient delivery of basic government service and protection of public safety.
- Promote the creation of safe, crime-deterrent public and private environments by encouraging the use of crime-preventive principles in the planning and design of communities, open spaces, circulation networks, and buildings.

E.5 CHAPTER 5: IMPLEMENTATION

This chapter discusses the various measures that will be necessary to ensure timely implementation of the plan, including those measures that will minimize disruption during the transition into the plan. Among the measures addressed by this chapter, changes to the zoning maps and the Land Use Ordinance will be necessary to achieve required consistency with the *Sustainable* Communities Plan, as will various other regulatory codes and standards. This chapter also addresses monitoring of plan implementation and provides for comprehensive review of the plan at five-year intervals.

E.6 APPENDIX A

The appendix provides three color maps that illustrate some of the plan's textual provisions. Because these maps are intended merely to be illustrative of the text, if there are any conflicts between the maps and the text, the text shall prevail.

1. NORTH SHORE'S ROLE IN OAHU'S DEVELOPMENT PATTERN

The North Shore Sustainable Communities Plan area extends from Kaena Point to Waialee Gulch near Kawela Bay, and from the shoreline to Helemano and the slopes of the Waianae and Koolau Mountain Ranges. It consists mostly of agricultural lands and open space, which surround the country towns of Haleiwa and Waialua and the residential communities of Mokuleia, Kawailoa, and Sunset/Pupukea.

A number of distinguishing characteristics help define the North Shore *Sustainable* Communities Plan's key role within the City and County of Honolulu. For many Oahu residents and visitors, the North Shore is associated with huge winter surf, scenic shoreline and white sand beaches, picturesque valleys and coastal pali, and vast, open expanses of agricultural lands set against dramatic mountain backdrops. Nestled within the open countryside are older communities, newer residential subdivisions, and two small towns with diverse cultural heritage.

For many Oahu residents, the North Shore is "the country." Its Hawaiian heritage, cultural diversity, and plantation past are reflected in its small rural communities and large expanses of agricultural lands and open space. The region's rural towns and residential areas still feature a country atmosphere with low-density residential structures and low-rise buildings housing retail establishments, restaurants, and surf shops. For many, the North Shore is a place for rest and recreation. They travel there to enjoy the country atmosphere and seek recreation at its numerous white sand beaches or mountain areas. It remains today as an essential haven and respite from the urbanized areas of Oahu.

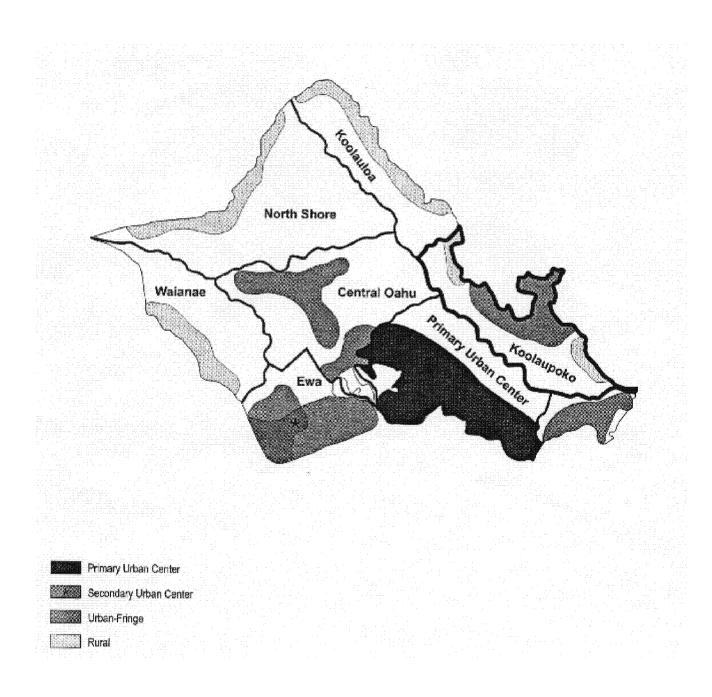
The General Plan of the City and County of Honolulu directs growth to the Primary Urban Center and Ewa and limits growth in the urban fringe and rural areas (Exhibit 1.1). It designates the North Shore as a rural area where growth will be managed so that "an undesirable spreading of development is prevented, and their proportion of the islandwide resident population remains unchanged." The General Plan also specifies that agricultural lands along the Windward, North Shore, and Waianae coasts are to be maintained for diversified agriculture.

In this context, the role of the North Shore *Sustainable* Communities Plan area is to maintain the rural character, agricultural lands, open space, natural environment, recreational resources and scenic beauty of Oahu's northern coast, in contrast to more urbanized areas of Oahu such as the Primary Urban Center, East Honolulu, Central Oahu, and Ewa. In line with the General Plan policies to preserve the open space and country atmosphere of the rural areas, the North Shore *Sustainable* Communities Plan will limit growth to "infill" areas within or adjacent to built-up areas to accommodate existing and future housing and employment needs, while maintaining the region's population at 1.8 percent of the islandwide population for the year 2020.

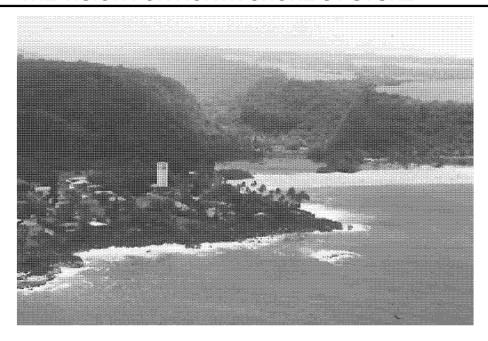
This update reaffirms the North Shore's role as a rural area as intended in the General Plan policies by establishing the following principles for future land use in the North Shore *Sustainable* Communities Plan:

- Maintain the region's rural character by promoting diversified agriculture, preserving scenic open space, and retaining the small-town, country atmosphere of the region's typically low-rise, low-density communities.
- Preserve agricultural lands for current and future agricultural uses and support the diversified agriculture industry.
- Protect and preserve the natural environment and natural resources and features, including: mountain, forest and watershed areas; marshes, rivers, and streams; shoreline areas, fishponds, and bays; and reefs and offshore islands.
- Preserve scenic views of the mountains, coastal pali and shoreline areas including mauka and makai views seen from near shore waters and heavily traveled areas such as Kamehameha Highway and Kaukonahua Road.
- Protect cultural, historical, and archaeological resources by promoting the interpretive and educational use of these sites, buildings, and artifacts.
- Manage and sustain ocean and nearshore resources to assure their long-term availability.
- Enhance opportunities for a wide range of recreational activities by providing community-based as well as natural resource-based parks, and by securing convenient public access, including public right-of-ways, bikeways, and pedestrian walkways to beaches and inland recreation areas.
- Facilitate the country lifestyle by establishing rural design guidelines emphasizing open space, landscaping, and the scenic qualities of an area, so that new development will be in keeping with the desired rural character of the region.
- Support businesses which serve the agricultural, educational, health, and tourist industries and the local population, and provide employment for North Shore residents consistent with the low-key rural atmosphere of the North Shore.
- Provide sufficient lands adjacent to built areas of Haleiwa and Waialua for housing that is compatible with the region's rural character and affordable to area residents, without exceeding the General Plan's population guidelines for the region and in line with the General Plan policies to maintain the North Shore as a rural area.

Exhibit 1.1
General Plan Designations: Urban, Urban Fringe, and Rural Areas



2. THE VISION FOR NORTH SHORE'S FUTURE



Waimea Bay

This chapter presents the vision for North Shore's future and describes the key elements of this vision. Based on community input and General Plan policies for the region, the vision provides the basis for the *Sustainable* Communities Plan's policies, principles, and guidelines, which, in turn, will direct future land use decisions and natural resource management policies and programs on the North Shore.

The vision for North Shore extends to the year 2020. Between 1999 and 2020, North Shore is projected to experience very little growth. The region will remain country, with wide open space and rural communities, and growth limited to Haleiwa and Waialua. North Shore's population is projected to remain at 1.8 percent of the islandwide population, at 19,560 in the year 2020, which is consistent with the General Plan population distribution policies for Oahu.

This section contains the vision statement for the North Shore *Sustainable* Communities Plan area and describes the desired future conditions in the area in the year 2020 and beyond.

2.1 VISION STATEMENT

The North Shore in the year 2020 retains the unique qualities that have long defined its attractiveness to residents and visitors alike. It has maintained its scenic open spaces, enhanced its coastal resources, and has carried the flavor of its Hawaiian heritage, cultural diversity, and plantation past forward in the revitalization of its communities.

A varied quiltwork of crops and forest products now defines its vast tracts of agricultural lands. Its coastal waters, beaches, and parks, linked by walkways and bicycle routes, host a rich

array of recreational pursuits. Its mountain areas provide safe havens for native plants and wildlife as well as wilderness settings for appropriate backcountry recreation. Haleiwa and Waialua remain the region's principal commercial and civic centers. These towns and associated residential communities reflect the area's history and maintain its rural character while meeting the needs of the 21st Century.

The growth of diversified agriculture has retained the North Shore's open space setting, given rise to agricultural processing and other support industries, and produced farmers' markets and other agricultural specialty outlets. Along with growth in the visitor and recreational industries, this has resulted in further needs for conventional commercial and industrial services, and an increase in cottage industries.



Agricultural Lands in Waialua

To maintain the region's rural character, these new activities have been centered at Haleiwa and Waialua. Haleiwa has remained the North Shore's regional commercial center, hosting a variety of specialty outlets, dining establishments, professional and business services, and water sport enterprises, along with low-key, country-style visitor accommodations. Waialua has become a renewed center for agricultural activity, a town center for resident commercial services, and a resource center for technology education within its schools. While some of the needed new housing will be located in Haleiwa, most new residential neighborhoods will be located at Waialua.

Both towns retain their historic character, while serving as the main employment centers for the region. Similarly, all new residential neighborhoods and their supporting parks, playgrounds, and public services have been developed to standards which reflect their rural settings. In these ways, the North Shore of Oahu, long an attraction for Hawaii residents and visitors alike, has emerged in the year 2020 as a thriving model rural community in an open

space setting that has successfully preserved its natural, cultural and historical heritage, linked its past with the future, and blended "Old Hawaii" with the 21st century.

2.2 KEY ELEMENTS OF THE VISION

The vision for the North Shore will be implemented through the following key elements:

- Rural Community, Agriculture, and Preservation Boundaries;
- Support for the diversified agriculture industry;
- Enhancement of the region's recreational and educational potential;
- Haleiwa and Waialua town as "country towns";
- Waialua Mill site as the regional industrial center;
- Additional new housing limited to areas contiguous to Haleiwa and Waialua towns and establishment of rural design guidelines;
- Adequate public infrastructure, facilities, and services;
- Retention of cultural and historic resources; and
- Adaptation of the Ahupua'a concept in land use and natural resource management.

Each of these elements is discussed below.

2.2.1 Establish Rural Community, Agriculture, and Preservation Boundaries to Protect Agricultural, Open Space, and Natural Resources

The North Shore is characterized by vast tracts of agricultural lands, open spaces, and natural and cultural resources. To protect these resources from development, three types of boundaries have been established to guide development and preserve open space and agricultural areas. These are the Rural Community Boundary, Agriculture Boundary, and Preservation Boundary. It is intended that these boundaries will remain fixed through the 2020 horizon. They are intended to help guide resource management, future development or redevelopment within existing zoning designations or future zoning designations and other standards or guidelines that may be developed in response to plan provisions, other established entitlements, or in accordance with pertinent policy and character described in this plan.

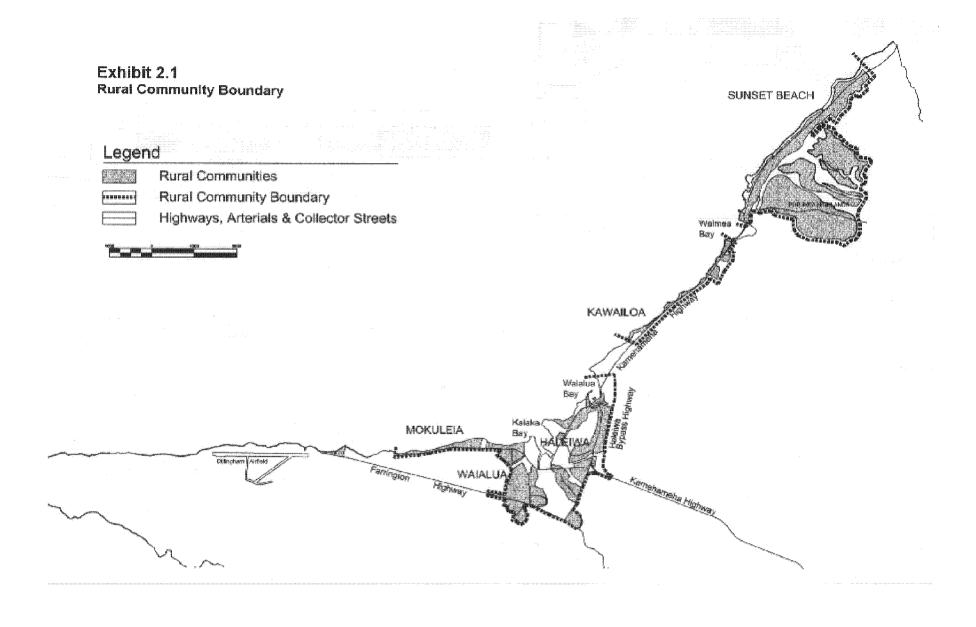
Rural Community Boundary

The Rural Community Boundary (RCB) is established to define, protect, and contain communities in areas which the General Plan designates "rural" and which exhibit the physical characteristics of rural lifestyles. The purpose of this boundary is intended to provide adequate lands for facilities needed to support established communities, to protect such communities from more intense land uses and patterns of development associated with more urban areas and to protect areas outside the boundary for agriculture or other resource or open space values. Where appropriate, this boundary also contains open space elements, the preservation of which is essential to the character of the rural community being defined. They may include lands designated "park," "agriculture," "preservation," or areas with development-related hazards such as steep slopes or unstable soils.

Rural communities defined by this boundary consist of smaller, more dispersed, less intensively developed residential communities and towns, and minor industrial areas than those of urban or urban fringe areas. Development character is generally low density, low rise, small scale, and reflective of a "country" setting. Within residential areas, the landscaping and front yards which provide the foregrounds to their respective residences are the principal visual elements. In commercial areas, the pedestrian environment and associated amenities predominate, and storefronts on both sides of the street are simultaneously perceivable. Buildings are oriented principally toward the street, relate readily to a person's size, and are organized to encourage interaction between the public and private domains.

As shown on Exhibit 2.1, the RCB on the North Shore conceptually defines the limits of residential, commercial, industrial, or other similar uses. As no proposals for these types of uses will be considered outside the RCB, this boundary also prevents the encroachment of development onto important agricultural lands and open spaces.

Areas outside the RCB include important agricultural lands as well as preservation lands which include areas with important open space, scenic, or natural resource values. Uses such as commercial and industrial development, public and private schools, and residential subdivision with no bona fide agricultural activities should not be permitted in these areas. Permissible land uses include agriculture and limited low-intensity types of outdoor recreational uses where appropriate, such as on nonagricultural lands or agricultural lands that are not suitable for intensive cultivation, provided they do not diminish the agricultural potential of these sites. Such uses must be compatible with the open space, and the natural and scenic character of these resources. Other permitted uses outside the RCB include environmental and educational programs and facilities that are resource compatible, such as the proposed International Science, Mathematics, and Technology Teacher Training Center that uses existing facilities at Camp Mokuleia and Camp Erdman in Mokuleia.



Rural communities within the RCB include concentrations of residential, commercial, and industrial uses as well as the network of roads, parks, and open spaces which define their edges or give them character. Relative to the State Land Use District boundaries, the RCB generally circumscribes built-up sections of Mokuleia, Waialua, Haleiwa, Kawailoa, and Sunset Beach that are within the State Urban District. It also includes portions of the State Agricultural District in Sunset Hills, Pupukea and Lihi Lani that are zoned as Country, as well as portions of the State Agricultural District makai of the highway in Haleiwa and Waialua that are designated and zoned for agricultural use. However, except for limited "infill" areas contiguous to Haleiwa and Waialua towns that are designated for future residential and commercial areas, agricultural lands within the RCB should remain in the State Agricultural District and continue to be designated and zoned as Agriculture, so as to maintain the agricultural uses and/or open space value within the RCB.

Within the RCB, open space will continue to define communities, and significant natural resources (such as streams, natural drainageways, wetlands, and fishponds) will continue to be protected. New development within the RCB is limited to infill low-density, low-rise development contiguous to existing built areas, to promote a compact form of development that will result in lower development costs and more efficient utilization of existing infrastructure systems. It is anticipated that these infill areas within the RCB contain ample capacity to accommodate existing and future residential, commercial, and industrial needs to the year 2020.

Agriculture Boundary

The Agriculture Boundary is established to protect important agricultural lands for their economic and open space values, and for their value in helping to give a region its identifiable character. Important agricultural lands include lands currently in agricultural use and lands with high value for future use. They include agriculturally important lands designated "prime," "unique," or "other" by the "Agricultural Lands of Importance to the State of Hawaii" (ALISH) maps.

The primary use of all lands within these boundaries must be agriculture or directly supportive of the agriculture industry. Exceptions include residential uses if they are permitted under the zoning code, outdoor recreational uses where compatible and appropriate, environmental and educational activities that are resource compatible, and "institutional" uses and environmentally compatible earth stations and communications facilities, which must prove and be developed and operated to maintain compatibility with agricultural uses.

The Agriculture Boundary is not displayed as a discreet boundary on the Open Space, Land Use and Public Facilities Maps in Appendix A. It is implied rather, by the agricultural land use designations outside the Rural Community Boundary.

Preservation Boundary

The Preservation Boundary is established to protect lands which form an important part of a region's open space fabric for their natural, cultural, or scenic resource value. Such lands

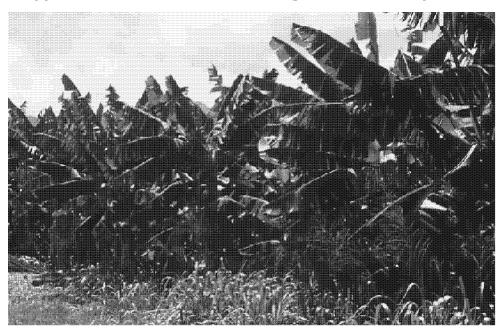
include important wildlife habitat, archaeological or historic sites, significant landforms or landscapes over which significant views are available, and hazard areas. Significant natural resources on the North Shore also include Natural Area Reserves, Forest Reserves, and other important ecological zones that lie outside the Rural Community Boundary. These resources are identified and protected by policies and guidelines from incompatible uses. Establishing buffer zones around biologically sensitive areas and setbacks along streams, wetlands, and coastlands will help toward preservation of these resources.

The Preservation Boundary generally circumscribes underdeveloped lands outside the Rural Community and Agriculture Boundaries that are designated as Preservation on the Open Space, Land Use and Public Facilities Maps in Appendix A. They include the following types of land:

- Land necessary for protecting watersheds, water resources and water supplies;
- Lands necessary for the conservation, preservation and enhancement of sites with scenic, historic, archaeologic or ecologic significance;
- Lands necessary for providing and preserving parklands, wilderness and beach reserves, and for conserving natural ecosystems of endemic plants, fish and wildlife, for forestry, and other related activities to these uses;
- Lands having an elevation below the maximum inland line of the zone of wave action, and marine waters, fishponds and tide pools unless otherwise designated;
- All offshore and outlying islands unless otherwise classified;
- Lands with topography, soils, climate or other related environmental factors that
 may not be normally adaptable or presently needed for urban, rural or
 agricultural use;
- Lands with general slopes of 20 percent or more which provide for open space amenities and/or scenic values;
- Lands susceptible to floods and soil erosion, lands undergoing major erosion damage and requiring corrective attention by the State or Federal Government, and lands necessary to the protection of the health, safety and welfare of the public by reason of soil instability or the lands' susceptibility to landslides and/or inundation by tsunami and flooding;
- Lands used for national, state or city parks outside the Rural Community Boundary; or

• Lands suitable for growing commercial timber, grazing, hunting, and recreation uses, including facilities accessory to such uses when said facilities are compatible with the natural physical environment.

2.2.2 Support and Promote a Diversified Agriculture Industry



Banana Farm in Haleiwa

A healthy agricultural industry can generate economic opportunities that are appropriate to the region's open space and rural qualities. In addition to creating Rural Community and Agriculture Boundaries that provide long-range protection for agricultural lands, land use policies and guidelines are defined to protect important agricultural lands from encroachment by incompatible uses and to encourage long-term investments in productive agricultural uses on those lands. Economic incentives to support the industry, including tax or other incentives or measures to maintain productive agricultural lands, facilitate conversion from plantation crops to diversified agriculture, and promote long-term leases or sale of lands for farming should be considered.

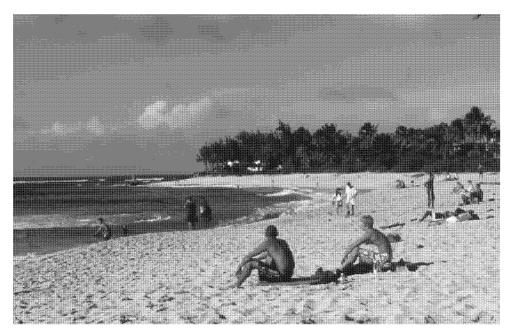
Industrial and commercial activities which support or service agricultural production will create further economic opportunities. To promote the cost-efficient use of existing infrastructure and prevent urbanization of agricultural lands, major agricultural support facilities should be consolidated in designated areas that are accessible to existing infrastructure. Qualified uses which meet specific criteria outlined in Section 3.2.2 should be allowed on a permit basis in these areas.

Existing agricultural support facilities are currently located at the Waialua Mill site. To allow for expansion, the area makai of the mill site is identified as a primary agricultural support area for the region. A secondary agricultural support area is proposed in Kawailoa near

Alluvion Nurseries, to provide localized support for adjacent agricultural activities in the mauka fields of Kawailoa.

2.2.3 Enhance the Region's Recreational and Educational Potential

The North Shore is known for its numerous beach parks, world famous surf spots, and abundant mauka and makai resources. To preserve and enhance the recreational resources along the shoreline, and to meet islandwide demands on these resources, policies and guidelines are proposed to expand access to the shoreline, to improve parks with supporting facilities such as bathrooms, showers, parking, etc., and to expand beach parks whenever feasible.



Sunset Beach

In addition to ongoing park improvements at existing parks such as Sunset Beach Park (BP), Aweoweo BP, and Haleiwa Alii BP, expanded access and improvements to other beach parks in the area are proposed, including Mokuleia BP, Makaleha BP, Haleiwa BP, Laniakea BP, Kawailoa BP, Uppers and Leftovers BP, Kaunala Bay BP, and Waialee BP. Camping facilities are being proposed at Waialee BP. The maintenance and improvements to existing beach parks as well as additional access to the shoreline should be a priority.

For the mauka areas, policies and guidelines provide for expanded access for appropriate forms of recreational opportunities that do not compromise significant environmental resources or important agricultural activities. Access to mauka areas above Mokuleia, Haleiwa, and Pupukea could be expanded for hiking, camping, hunting, and horseback riding or other resource-compatible forms of recreation within the context of sound resource management.

To explore and support the educational potential of Mokuleia and Waialua, low-impact, resource-sensitive environmental, educational, and cultural interpretive programs could be accommodated at Kaena Point and in the mauka areas of Mokuleia, Haleiwa, and Pupukea. While promoting expanded access and recreational opportunities to coastal and mauka resources, the value of the resources must be protected from overuse. Efforts to establish an International Science, Mathematics, and Technology Teacher Training Center at Mokuleia and Waialua and a resource center for technology training and long-distance learning at Waialua schools should be encouraged.



Peacock Plats in the Waianae Mountain Ranges

More community-based parks for area residents with better maintenance and amenities to support the community's recreational needs should be provided. As new housing areas are developed in Waialua, Puuiki Park should be acquired to serve as a community-based park for area residents. In Haleiwa, the proposed Haleiwa Mauka Park (commonly known as the Haleiwa Regional Park) should be developed as a community-based park with facilities to accommodate active as well as passive recreational pursuits. In addition, an integrated system of pedestrian paths/bikeways linking the parks, schools, and town centers in Waialua and Haleiwa is proposed. In the long term, a public golf course on the North Shore could be considered to expand recreational and employment opportunities in the region.

2.2.4 Designate Haleiwa and Waialua Towns as "Country Towns"

Haleiwa and Waialua towns are the main commercial districts on the North Shore with different functions and distinct characteristics. The historic Haleiwa town with its "main street" ambience is the region's main commercial attraction for residents and visitors, while Waialua town is a plantation town that services the residents of Waialua and Mokuleia.

To maintain their rural "small town" character and to promote compact town development, "country town" designations are proposed for the cores of both towns. This would allow for a mix of commercial, residential, and compatible industrial uses (such as small product or clothing manufacturing and assembly) with policies and guidelines to ensure that the scale and character of future renovation, redevelopment or other new construction reflects the towns' historic character and the region's rural landscape.

Haleiwa. New development should continue to be concentrated along Kamehameha Highway. The Haleiwa Special District Design Guidelines remain in force to ensure that all new development is compatible with existing built areas and the rural character of the region. Ongoing efforts to improve Haleiwa Town with entry features, landscaping, pedestrian walkways, and off-street parking behind buildings are encouraged. The *Sustainable* Communities Plan envisions a revitalized Haleiwa Town with shops and restaurants, professional and service businesses, enterprises with art and recreational themes, and specialty outlets featuring regional products.

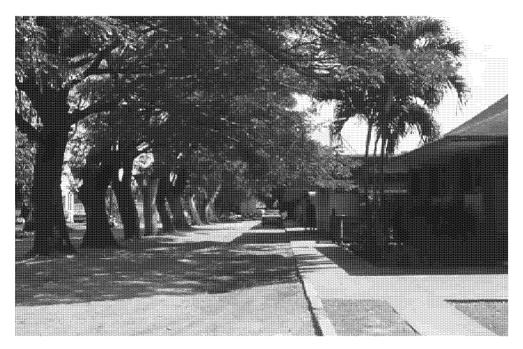
To attract more visitors to Haleiwa and keep them in the area longer, appropriate forms of overnight visitor accommodations in the form of small-scale country inns should be allowed on a permit basis in the Haleiwa Country Town district. To ensure that the region's rural character and infrastructure system are not adversely affected, locational and performance criteria for visitor accommodations should be established.



Haleiwa Town

Waialua Town is envisioned as a center for agricultural activity and resident services. Its proximity to Kaena Point and recreational opportunities in the area puts it in a good position to service the recreational and environmental education activities these areas may attract. A small country inn in the area could attract some visitors to the area and help to generate

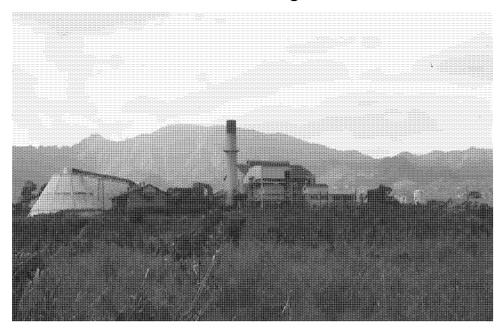
more business activities in the town core. The community's efforts to establish high technology industry in Waialua should be encouraged. Efforts include a high technology-based entrepreneur education and enterprise support system within the Waialua Complex schools and the schools' partnership with the University of California at Berkeley, as part of implementing the International Science, Mathematics, and Technology Teacher Training Center and its worldwide computer-based telecommunication network in the region. These efforts will also help to enhance the quality of education and, along with the establishment of a proposed private high school in the area, will promote education as an industry that will create professional-level jobs for area residents. In addition, Waialua's central location and proximity to the schools and park is ideal for locating civic and community services such as job training programs for the youth and support services for the elderly. To preserve its plantationheritage and rural character, design guidelines appropriate to Waialua Town should be established.



Kealohanui Street in Waialua Town

The core of Waialua Town should be centered around Goodale Avenue and Kealohanui Street, which could become a landscaped, pedestrian-oriented mall, anchored on the west by Waialua Coffee Visitor Center with its showcase processing areas and indoor plantation museum, and on the east with the Dole office building and an outdoor plantation museum. Appropriate forms of small-scale, low-intensity tourist activities which could include tours of the agricultural farms and processing facilities could help to revitalize the town's commercial center by attracting more people there.

2.2.5 Retain the Waialua Mill Site as the Regional Industrial Center



Waialua Mill

Waialua Mill site would remain as the industrial center for the region. In addition to industrial uses that support the agriculture industry, general industrial uses such as boat and car repair, surfboard manufacturing and repair, manufacturing of crafts and island products, and warehousing are permitted. Future expansion of the industrial area could be accommodated makai of the mill site. "Clean," non-noxious, service/industrial uses such as clothing and craft manufacturing would also be allowed behind or above streetfront commercial uses in the mixed use country town districts of Haleiwa and Waialua.

2.2.6 Limit New Housing to Areas Contiguous to Haleiwa and Waialua Towns and Establish Rural Design Guidelines for Rural Residential Development

In response to housing needs expressed by Waialua and Haleiwa residents and anticipated demand generated by growth in diversified agriculture and other industries, two residential expansion areas contiguous to Haleiwa and Waialua Towns are proposed. In Waialua, the existing mill camp between the mill site and Puuiki Road is designated Residential to reflect its existing use, and new housing will be located mauka of the mill camp, between Puuiki and Goodale Avenues. In Haleiwa, infill residential expansion could occur north of Paalaa Road on lands outside the flood plain.

To ensure compatibility with the region's rural character and surrounding open space, rural design guidelines and development standards are proposed for new residential areas. Rural models such as the plantation community at Poamoho Camp, which is characterized by clusters of single-story dwellings with landscaping, narrow streets, and common parks and open spaces within the neighborhood, could be adapted and considered as possible examples to follow.



Rural Residential Homes in Waialua

In addition to guidelines to limit building heights and lot coverage in order to maximize open space and landscaping, alternative development options to allow for site design flexibility, creative site utilization, and open space preservation are encouraged. Rural streetscape design, as opposed to more urban and suburban models, with narrower streets and grassed swales in place of sidewalks with curbs and gutters are considered appropriate. Where feasible and appropriate, existing plantation homes should be rehabilitated in a manner which allows them to be affordable to existing residents.

2.2.7 Provide Adequate Public Infrastructure, Facilities, and Services

Public agencies and private developers should work together to provide adequate infrastructure and needed facilities and services for residents and workers in the area. Infrastructure should not detract from scenic amenities, recreational opportunities, open space, or other amenities. New major facilities should be centrally located.

Adequate, environmentally sensitive wastewater treatment systems, with minimal impact on groundwater and ocean resources, to meet residents' and visitors' needs, should be a high priority.

In addition to improving drainage controls to mitigate storm runoff and flood hazards, adequate infrastructure for drainage systems should be established and maintained to ensure continuous runoff. Fields in agricultural production should implement Best Management Practices (BMPs), including those recommended in the State Coastal Nonpoint Pollution Control Program, to minimize soil erosion.

An adequate circulation network should be provided for all modes of transportation. The transportation system should include an integrated network of pedestrian paths and bikeways to link the various residential communities with parks, schools, and the town centers of Haleiwa and Wajalua.



Kamehameha Highway

Other priority needs identified by the community include retention of the public library in Waialua and maintenance of existing parks in the region.

Use of proven alternative sources of energy including use of solar energy systems should be encouraged.

2.2.8 Retain Cultural and Historic Resources

The North Shore has a wealth of historic and cultural resources. Preserving significant plantation era and other historic features such as at Haleiwa Town, Waialua Town, the Waialua Mill, and other sites, and protecting Native Hawaiian cultural and archaeological sites is important in retaining the area's unique identity and country character. Historic site restoration and interpretive programs should be integrated into the development of parks and shorelines and mountain access systems, to help enhance appreciation of these resources.



Puu O Mahuka Heiau

2.2.9 Adapt the Ahupua'a Concept in Land Use and Natural Resource Management

Under the Hawaiian land division system known as "ahupua'a," lands typically ran from the mountains to the sea and were managed using environmental land use and resources management practices that recognized the close relationship between land-based and marine-based natural resources. Adapted to the context of today's community needs and technology, the ahupua'a concept provides useful principles for guiding the use and management of the North Shore's natural resources. In keeping with this approach, the planning and implementation of land use decisions and land-based actions should fully consider related effects on coastal waters and nearshore environment.

3. LAND USE POLICIES, PRINCIPLES, AND GUIDELINES

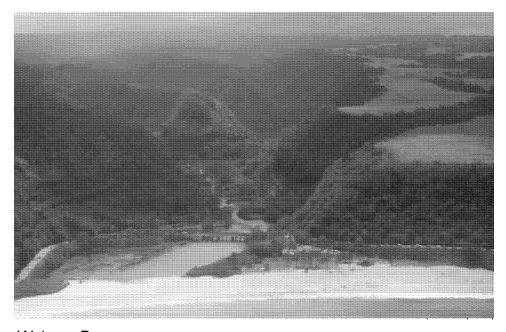
The vision for the North Shore described in the preceding chapter will be implemented through application of land use policies, principles, and guidelines.

The region's character is typified by pockets of low-rise, small-scale rural centers and residential communities surrounded by large expanses of agricultural lands, open space, and scenic view planes. To assure that this is maintained, proposed land use policies need to reflect an islandwide regional growth policy, resource protection, and community desires to maintain the region's rural setting and unique physical and lifestyle character. These policies focus on the preservation of agricultural lands and open space while directing limited growth toward Haleiwa and Waialua.

Proposed land use policies are intended to outline policies for future actions and agency decision making once the Plan is adopted. General policies are broad statements of intent that express the City's overall philosophy toward particular land uses. Planning principles and guidelines provide more specific guidance to public agencies and private entities in terms of planning, design and implementation of projects and programs in the various land use categories.

It is intended that existing current uses and structures that are legal but are not reflected by the proposed *Sustainable* Communities Plan policy would be recognized as existing uses and allowed to remain at their locations in their current purpose, character, and level of use. Future proposed land use changes at those locations, however, would have to conform with policies of the adopted *Sustainable* Communities Plan.

3.1 OPEN SPACE AND NATURAL ENVIRONMENT



Waimea Bay

Open space preservation is a key element of the vision for the North Shore. The natural landscape (the Koolau and Waianae mountain ranges, coastal pali, gulches, and shoreline areas) and man-made elements (agricultural fields and parks) are key open space resources that define the North Shore *Sustainable* Communities Plan area. Preservation of these resources is essential in maintaining the rural character of the North Shore.

To ensure integrated resource management practices, from the sea to the mountains, utilize the resource conservation and land use management principles of *ahupua'a*. These principles, adapted and applied to current land use activities and environmental regulatory and management practices, should reflect the interrelationship between land-based and marine-based natural resources. From the forested watersheds of the Koolau and Waianae ranges, to the streams, coastal wetlands, cultivated fields, and rural settlement areas, resource management practices should promote effective management of these resources and deter land-based activities which contribute to their degradation. In particular, care should be taken to avoid or minimize chemical runoff and other "nonpoint" contaminants into aquatic and marine habitats. References such as the Coastal Nonpoint Pollution Control Program¹ should be used to guide land use planning, management, and construction activities.

The vast majority of the open space elements in the region are designated as Preservation, Agriculture, and Park on the North Shore *Sustainable* Communities Plan. Of the 77,050 acres of land within the North Shore *Sustainable* Communities Plan area, approximately 96 percent are in open space uses, including 53 percent designated as Preservation, 40 percent as Agriculture, and 3 percent as Park.

Preservation areas include lands with significant environmental resources, as shown on Exhibit 3.1. They include watersheds; sites with scenic, historic, cultural, archaeologic or ecologic significance; and areas with natural ecosystems of endemic plants, fish and wildlife. They may also include lands that may be impacted by natural hazard such as tsunami-prone or flood hazard areas, or steep slopes.

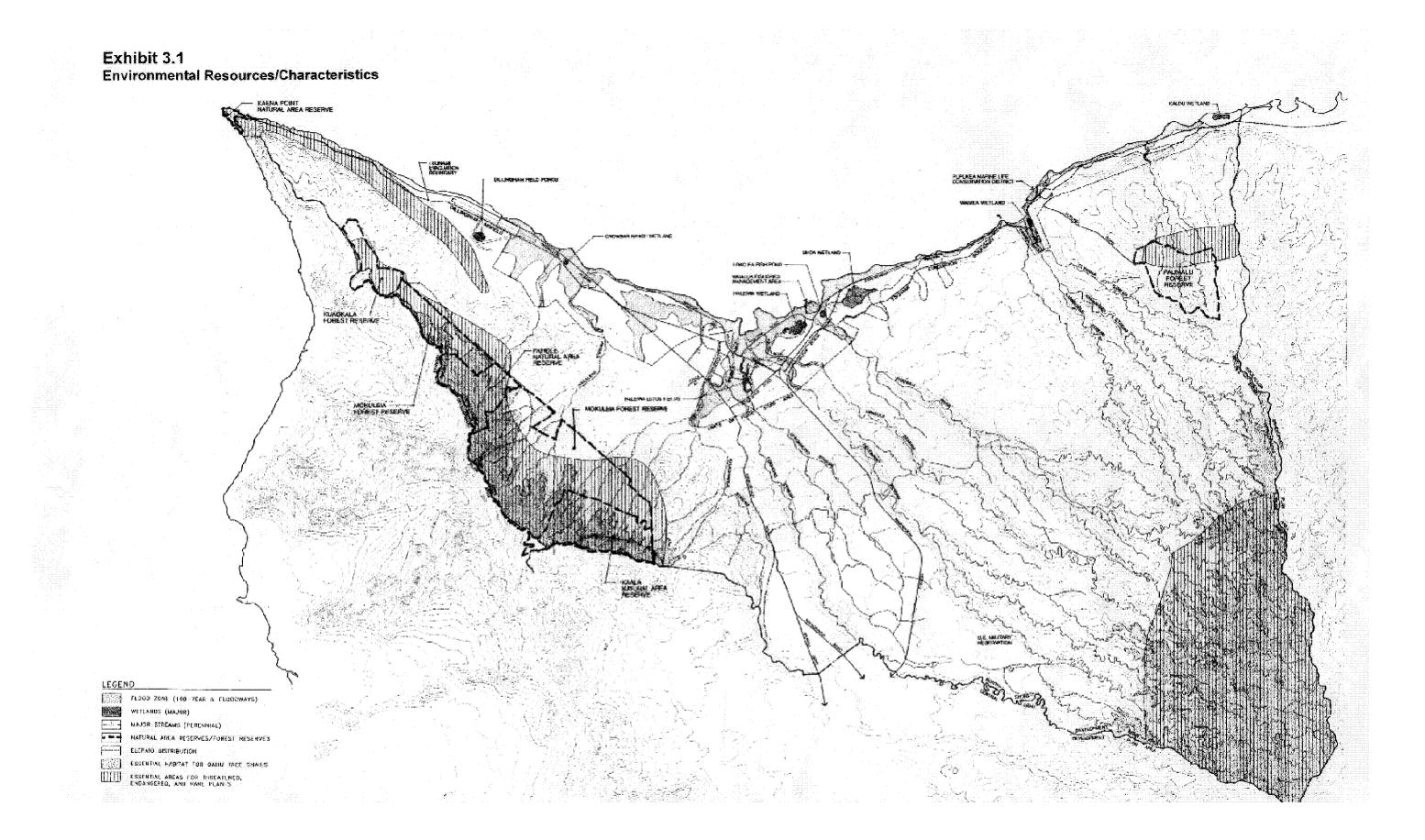
3.1.1 General Policies

The following are general policies for the preservation of open space and the natural environment:

- Retain the North Shore's rural character
- Protect significant natural features
- Protect ecologically sensitive lands
- Preserve cultural and historic features
- Provide recreational resources
- Protect scenic views
- Define community boundaries

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Office of State Planning, Hawaii Coastal Zone Management Program, Hawaii's Coastal Nonpoint Pollution Control Resource Management Plan, Volume 1, June 1996.



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3.1.2 Planning Principles

The general policies listed above provide the basis for the following principles:

- Ahupua'a Land Use and Resource Management. Adapt Hawaiian conservation and management values into land use and resource management practices based on respect for natural and cultural processes, love and stewardship of the land, a search for balance and harmony with nature, and recognition and respect for the close interrelationships between land-based and marine-based resources. Implement resource management practices from the sea to the mountains, such as those recommended in the State of Hawaii's Coastal Nonpoint Pollution Control Program. Retain the natural drainage and stream system, including appropriate buffer areas, and implement best management practices in agricultural land use and operations.
- Long-Range Protection of Agricultural Lands. Agricultural fields are desirable open space elements. To preserve open space and the rural character of the North Shore, policies should be implemented to support the continuation of agricultural uses on agricultural lands.
- Preservation of Scenic Views. Scenic resources include the Waianae and Koolau Mountain Ranges, coastal pali, the coastline, and the Pacific Ocean. Views of these resources from public places, including major roadways, should be preserved. More open space should be provided along the shoreline to preserve and enhance views of the ocean. New developments should seek to minimize impact on these scenic resources.
- **Protection of Recreational Resources.** Recreational resources include the ocean, beach parks, regional parks, district parks, community parks, and other quasi-public recreational facilities. These resources are important to the North Shore's open space quality and should be protected.
- Accessibility of Recreational Open Space. Public parks should be
 accessible for recreational use. The shoreline and mountain areas should also
 be made accessible; and appropriate recreational opportunities, such as
 biking, walking, running and equestrian activities, should be provided in ways
 consistent with principles of sound natural resource management.

Allowable uses should be limited to activities which do not require intensive facility development, do not detract from, degrade, or deplete natural resource values, and do not create or intensify hazardous conditions.

- **Protection of Ecologically Sensitive Lands.** Natural resources and ecosystems (such as streams, wetlands, fishponds, and drainageways) should be maintained and enhanced as open space elements. Protective buffer zones and setbacks around biologically sensitive areas should be created to minimize habitat disturbance.
- **Limit Impacts from Utility Installations.** If utility installations are permitted in this district, they should be developed and/or managed in ways that maintain or enhance the natural, cultural, and visual resource qualities.
- Location of New Developments. New developments should be located within or next to already existing developments within the Rural Community Boundary. Developed areas should be kept compact to preserve open space. Desired or necessary land uses such as affordable housing and public facilities such as schools should be balanced with the need to preserve open space.

3.1.3 Guidelines

The following provides a brief description of regional open space resources on the North Shore, followed by guidelines to carry out the general policies and planning principles related to each open space element.

3.1.3.1 Mountain Areas



Waianae Mountain Range

Mountain areas within the North Shore include both the Koolau and Waianae Mountain Ranges. Mountain areas are designated as Preservation and most of them are in the State

Conservation District. Some acreages along the foothills of the Waianae Mountain Range are designated as Preservation but are still in the State Agriculture District. These lands should be rezoned to P-2 as most of them have slopes of 30 percent or more and some contain endemic plants; but they should remain in the State Agriculture District, so as to allow for some agricultural uses that are permitted on P-2 lands, such as forestry and livestock grazing, where appropriate, which would help to contain the threats of brush fire on the mountain slopes.

Within the State Conservation District are several significant environmental resources, including the following Forest Reserves and Natural Area Reserves:

Forest Reserves

Natural Area Reserves

- Kuaokala Forest Reserve
- Mokuleia Forest Reserve
- Paumalu Forest Reserve
- Pahole Natural Area Reserve
- Mount Kaala Natural Area Reserve
- Kaena Natural Area Reserve

Forest Reserves contain watershed areas, where falling rain is intercepted by trees and other vegetation where it then seeps slowly through the soil to recharge underground water supplies and streams. Forest Reserves also serve as wildlife refuges and recreational areas. Some contain protection areas, such as the Natural Area Reserves, as well as public hunting areas. Most of the Forest Reserve areas are open to the public for certain recreational uses, such as hiking, camping, and seasonal hunting; while some are considered closed watershed areas, which means that the public is prohibited from entering without a permit. Forest Reserves are important resources for protecting watersheds, aesthetic beauty, wildlife habitats, undisturbed ecosystems, and rare native species while providing forestry use and public recreation.

Natural Area Reserves were established by the State to protect and preserve representative examples of the Island's unique native ecosystems and geological formations. They require active management to counteract damage from feral animals such as pigs, goats, deer, and cattle, noxious weeds, and human disturbance. Permanent funding and staffing are needed to continue careful management of these areas.

Access to the mountain areas is available via hiking trails. The Kuaokala Trail, Mokuleia Trail, and Kealia Trail form a network that passes through the Mokuleia Forest Reserve and the Pahole Natural Area Reserve. In Pupukea, the Kaunala Trail passes through the Paumalu Forest Reserve. A number of trails are on private lands and permission is needed for access to these private trails.

The Natural Area Reserves, Forest Reserves, and public trail systems are managed by the State Department of Land and Natural Resources. Mountainous land forms also include coastal pali which occur mauka of many of the North Shore's shoreline areas. Their scenic characteristics should be protected and preserved for general public enjoyment.

Guidelines pertaining to mountain areas are as follows:

- Maintain, protect and/or restore native forests and ecosystems within the State Conservation District and Sustainable Communities Plan Preservation District. Ensure the protection of conservation lands on the Kaena coastline and Mokuleia foothills.
- Identify and protect endangered species habitats, native ecosystems, and other important ecologically sensitive areas, including the Natural Area Reserves and Forest Reserves, from such threats as fire, alien species, feral animals, and human activity.
- Encourage reforestation and expansion of forested areas for the preservation of native species, watershed protection, and aesthetic enhancement. Protect possible candidates for future Natural Area Reserves, including the Central Koolau Mountains, which contain watershed forests and several wet lowland plant communities; Upper Makaleha (adjacent to Pahole Natural Area Reserve), which contains several rare and vulnerable dryland and mesic communities; and an extension to the Kaena Point Natural Area Reserve that would lend protection to rare coastal plant communities.
- Avoid disturbances caused by utility corridors and other uses on areas with high concentrations of native species.
- Support public-private partnership in cooperative efforts to preserve and manage watersheds, native ecosystems, and other environmental resources. Encourage coordination of natural resource protection and management efforts between the State DLNR and private landowners, as well as with U.S. Military, especially where the Kahuku and Kawailoa Training Areas overlap with environmentally sensitive areas.
- Acquire and maintain public access easements to trail heads and public campgrounds, including parking and signage at trailheads, where appropriate.
 Such access should be required, as appropriate, for any development.
- Support State efforts to seek opportunities for cooperative agreements with private landowners to gain access to trails leading to public lands.
- Maintain and enhance mauka trail systems by implementing the recommendations in the State's Na Ala Hele Program Plan.
- Identify historic trails and old government roads of cultural and recreational value to the public.

3.1.3.2 Shoreline Areas



Cove at Kaena Point

The North Shore's shoreline extends for over 27 miles between Kaena Point and Waialee. This world-renowned shoreline provides residents and visitors with significant active and passive recreational resources and is a key element in defining the region's rural character and lifestyle. In addition to their recreational and cultural value, shoreline areas are critical to the health of the coastal marine ecosystem, flood and erosion prevention, and also provide significant scenic value.

The North Shore shoreline varies from the rugged rocky coastline at Kaena Point to the popular sandy beach at Sunset Beach. Portions of the shoreline, notably portions of Mokuleia, Kawailoa, and Sunset Point, have experienced beach narrowing or loss due to erosion activity, as a result of natural shoreline processes, development and armoring along the shoreline. An integrated coastal erosion management system to mitigate beach erosion and preserve coastal resources is needed. The State Department of Land and Natural Resources (DLNR) has developed a Coastal Lands Program to manage growth along the state's shoreline to balance conservation and development, and to oversee the implementation of technical recommendations and policies embodied in the Coastal Erosion Management Plan (COEMAP) to ensure sustainable coastal development.

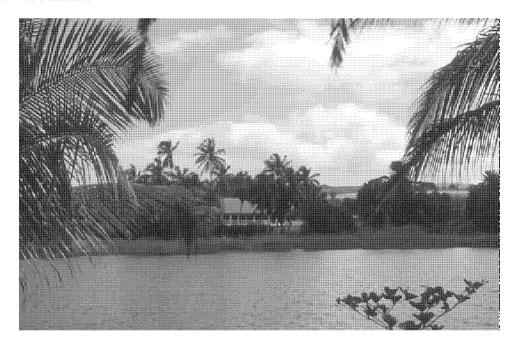
Guidelines for shoreline areas include the following:

 Preserve rare coastal resources including coastal strand vegetation, sand dunes, and archialine pools. Establish buffer zones around these areas where necessary. Discourage off-road vehicle use in ecologically sensitive areas.

- Protect nearshore coral reefs from damaging activities such as soil erosion, nonpoint source pollution, dredging of coral reefs, and alterations to nearshore water circulation.
- Support research to determine causes of coastal erosion and identify appropriate management strategies to avoid future erosion hazards. Encourage interagency coordination and public/private cooperation in developing and implementing beach management plans, with an emphasis on nonstructural approaches.
- Discourage development or activities which result in beach loss. Encourage development or activities which result in beach preservation or enhancement.
- Maintain and expand public beach access to the shoreline and lateral shoreline access along the coast, especially in areas with high recreational or scenic value, including the shoreline along Sunset and Kawailoa where access to popular sandy beaches and surf spots are in demand. Public access should generally be no more than 1/2 mile apart in undeveloped areas and no more than 1/4 mile apart in developed areas. Acquire shoreline properties as opportunities arise or obtain public use easements and maintenance agreements with private landowners, especially lands adjacent to existing public parks.
- Maintain and enhance existing views along the coastal highway. Avoid visual obstructions such as walls, and clear shrubs and vegetation on vacant Stateand County-owned properties to maintain views of the ocean from public roadways along the shoreline.
- Where structures are permitted on lands abutting the shoreline, adequate setbacks should be provided. Establish greater shoreline setbacks for new structures in erosion hazard areas, using criteria from the various shoreline studies. New structures should incorporate building styles compatible with coastal hazards such as coastal erosion, tsunami and hurricane overwash. Buildings should adhere to the City's and FEMA minimum building elevations and architectural guidelines.
- Preserve and enhance native and other resident fish and aquatic species
 populations and habitats, including nearshore coral reefs, through active
 protection and management practices. Efforts to enhance opportunities for
 commercial and recreational fishing should use management practices and
 techniques that sustain fish populations and habitat quality so as to maintain a
 quality aquatic environment for public enjoyment.
- Obtain use of Federal and State lands and waters and acquire available excess lands for coastal recreation and improved shoreline access.

- Base governmental expenditures for coastline maintenance and improvements on actual site usage (including visitors) rather than on island population ratios or land values.
- Place sand from channel, stream, and harbor mouth dredging projects on local beaches.

3.1.3.3 Wetlands



Loko Ea Pond

Wetlands are generally described as areas which are covered or saturated with water, whose substrate is primarily characterized by undrained moist or saturated soils and which support water-loving plants. Wetlands are important environmental resources that can provide irreplaceable benefits including flood protection, water quality improvements, habitat for fish and wildlife, and opportunities for recreation, education, and research. The U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, and the U.S. Environmental Protection Agency as well as State and County agencies have responsibilities for the protection and management of wetlands.

On the North Shore, the following are the significant wetland areas:

- Haleiwa Marsh
- Ukoa Wetland
- Loko Ea Fish Pond
- Kalou Marsh
- Crowbar Ranch Wetland

- Dillingham Field Ponds
- Waimea Wetland and Estuary
- Haleiwa Lotus Fields

Guidelines pertaining to wetland areas are as follows:

- Preserve and maintain all North Shore wetlands and wildlife habitats. When
 considering future activities/construction in the vicinity of biologically sensitive
 areas such as wetlands, the preferred sequence will be to:
 - avoid ecologically sensitive areas entirely;
 - if not possible, minimize project effects; and
 - if negative effects are unavoidable, require mitigation that will offset the loss of resources.

Encourage interagency coordination and public-private partnership in planning and management efforts of these resources.

- Protect Ukoa Pond, which has been identified by the State Wetlands Resources Plan as a top-priority wetland. Protection can be achieved through fee acquisition, land banking, cooperative agreements with public agencies and private landowners, conservation easements, and other strategies.
- Promote the development of an aquaculture center and nature reserve around Loko Ea Pond that would serve as an attraction for both visitors and residents. It could feature a working aquaculture farm utilizing Loko Ea Pond and include educational programs on modern aquaculture techniques and the history of the Pond and the heiau. The facility could also include walkways extending north to Ukoa Pond for interpretive nature walks.

3.1.3.4 Natural Gulches, Streams, and Drainageways

The ridges and valleys of the Koolau and Waianae Mountain Ranges form streams and natural drainageways which are integral elements of the open space on the North Shore. Several intermittent and perennial streams provide essential habitat for Hawaii's flora and fauna. To protect stream resources, major streams and stream corridors are designated as Preservation on the North Shore *Sustainable* Communities Plan

Streams are also the primary means for carrying water from the inland areas to the ocean and are normally capable of handling runoff from normal rainfall amounts. During periods of intense rainfall, however, a number of these drainageways overflow (see Section 4.6).



Anahulu Stream/Kawailoa Gulch

The following are the significant gulches and streams on the North Shore:

- Makaleha Stream/Gulch
- Kaukonahua Stream/Gulch
- Kiikii Stream
- Poamoho Stream/Gulch
- North Poamoho Stream/Gulch
- Paukauila Stream
- Helemano Stream/Gulch
- Opaeula Stream/Gulch

- Anahulu Stream/Kawailoa Gulch
- Waimea River
- Kaiwikoele Stream/Gulch
- Kamananui Stream/Gulch
- Elehaha Stream/Gulch
- Kalunawaikaala Stream/Gulch
- Pakulena Stream/Gulch
- Kaunala Gulch

Guidelines pertaining to natural gulches and drainageways are as follows:

- Preserve the aesthetic and biological values of the natural gulches, streams, and drainageways as part of the North Shore's open space system. Where feasible, establish wildlife habitat protective buffer zones and/or setbacks along rivers, streams, and shoreline areas. Where possible, provide public access to these open space and recreational resources.
- Minimize soil erosion, runoff of pesticides, fertilizers and other nonpoint source contaminants into streams, wetlands, and marine habitats. In addition to stream setbacks, utilize erosion control devices, integrated pest management plans, and revegetation of disturbed areas. Incorporate erosion control measures and best management practices, as recommended in the State Coastal Nonpoint Pollution Control Program, to prevent pollution of wetlands, streams, estuaries, and nearshore waters.

- Limit uses in these areas to conservation uses, compatible recreational uses such as hiking, traditional hunting, fishing, gathering, religious and cultural practices, and controlled diversion for agricultural purposes. Avoid development in ecologically sensitive areas; if activities are allowed, minimize impacts and implement mitigative measures that will fully offset any loss of resources.
- Preserve and maintain the natural streams and drainageways within the
 developed areas by designating them as part of the open space system. To
 the extent possible, limit any modifications to natural gulches and
 drainageways, unless they are necessary for flood protection, to preserve water
 quality and protect aesthetic and biological resources.
- If modifications are necessary, mitigate impacts on biological habitats by using stream-side vegetation, rip-rap boulder lining of steam banks, v-shaped bottom channels to maintain a stream flow during low rainfall periods, and other designs to promote aeration.
- Integrate planned improvements to the North Shore drainage system into the regional open space network by emphasizing the use of retention basins and recreational access in the design approach.
- Establish permanent instream flow standards for perennial streams. These standards should weigh the benefits of instream and non-instream uses of water resources, including the economic impact of restrictions of such uses.

3.1.3.5 Agricultural Areas

The majority of the agricultural lands stretch from Mokuleia to Waimea and include the lands previously cultivated in sugar or pineapple. Preservation of agricultural areas is essential to maintaining the open space setting and the rural character of the region. In addition to the Rural Community and Agriculture Boundaries, policies and guidelines are established to protect agricultural lands from development. Policies and guidelines pertaining to agricultural areas are listed in Section 3.2.

3.1.3.6 Parks

Parks provide important open space areas to meet the recreational needs of the North Shore residents and islandwide visitors. While beach parks serve islandwide needs, parks within the community meet the recreational needs of the community. In addition to meeting recreational needs of the residents and visitors, parks play a major role in preserving the open space setting on the North Shore. Policies and guidelines on parks are included in Section 3.3.

3.1.3.7 Scenic Resources and Scenic Views

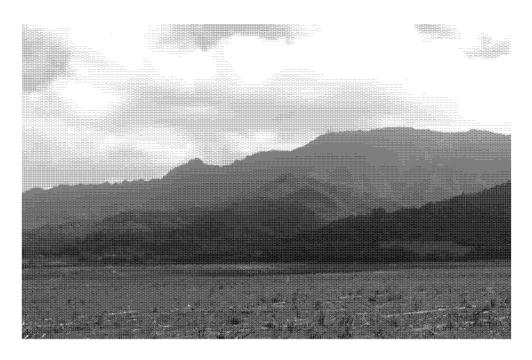
With its vast open spaces, scenic shorelines, and the backdrops of the Waianae and Koolau Mountain Ranges and the coastal pali, the North Shore is blessed with an abundance of scenic resources.



Waialee Beach Park

Scenic views throughout the region are identified on the Open Space Map. They include the following:

- Views of the Waianae and Koolau Mountains, the Pacific Ocean and shoreline,
 Waialua and Haleiwa Towns from Kamehameha Highway and Kaukonahua
 Road as one enters into the North Shore.
- Mauka views of the Waianae Mountains from Farrington Highway, Kaukonahua Road, Kamehameha Highway, and Weed Circle.
- Stationary views from the shoreline between Kaena Point and Makaleha Beach.
- Views of the Waianae Mountain Range and agricultural fields from Crozier Drive
- Makai views of Kaukonahua Stream to Kaiaka Bay from Farrington Highway near Thompson Corner.
- View from the Waialua Annex Bluff overlooking Kaukonahua Stream and the open space to Kaamooloa Subdivision.



Panoramic View of the Waianae Mountain Range

- Makai view of open space to Puuiki Beach Park from Puuiki Street and cane haul road crossing.
- Makai views along Haleiwa Road into Haleiwa Alii Park, Haleiwa Boat Harbor and Haleiwa Beach Park.
- Stationary mauka and makai views from Kaiaka Bay Beach Park, Haleiwa Alii Beach Park and Haleiwa Beach Park.
- Views of Kaiaka Bay from Haleiwa Road at Paukauila Stream.
- Mauka views along Kamehameha Highway of Anahulu Stream and Loko Ea Pond.
- Intermittent makai views from Kamehameha Highway between Kawailoa and Sunset Beach.
- Stationary views from beach parks and access areas from Kawailoa to Waialee Beach Park.
- Mauka views of the Koolau Mountains and Pali along Kamehameha Highway from Haleiwa to Waialee.

- Views from the road pullover above Waimea Bay, from the shoreline at Waimea Bay and from the coral formation at Pupukea Beach Park.
- Mauka and makai views of Waimea Valley and Bay from the Kamehameha Highway bridge over the Waimea River.
- Lateral views from Puaena Point.
- Lateral views from Pupukea Beach Park.
- Panoramic view from the area near the hairpin turn on Kawailoa Drive.
- Panoramic view of the coast from Pupukea Heights.
- View from Puu o Mahuka Heiau State Monument.
- Mauka views from nearshore waters.

Guidelines pertaining to scenic resources and scenic views are as follows:

- Conduct planning with attention to preservation of natural open space, protecting coastal and mauka views from public roadways, and conserving important viewsheds.
 - Many of the region's scenic resources encompass privately owned lands. In some cases, view reductions may come from diversified agriculture activities which intrude into viewplanes or otherwise degrade or diminish scenic qualities. The protection of roadway views should be balanced with the operating requirements of diversified agriculture.
- Evaluate the impact of land use proposals on the visual quality of the landscape, including viewplane and open space considerations.
- Locate any future overhead utilities on the mauka side of the public coastal highway. Whenever possible, overhead utility lines and poles that significantly obstruct public views should be relocated or placed underground. Strong consideration should be given to placing new transmission lines underground.
- Encourage interagency and private sector participation and cooperation in the creation, maintenance and enhancement of views and visual resources on the North Shore.

3.1.3.8 Utility Corridors and Greenways

Utility corridors and greenways are required to provide for a distribution system throughout the region. Where located in settlement areas, these corridors may provide for greenways that can serve as pedestrian or bicycle routes, if issues of safety, liability, and maintenance can be adequately addressed.

Guidelines pertaining to utility corridors and greenways are as follows:

- Provide sufficient easement width for the major trunk lines and transmission lines for utility systems, when their alignment is not within a road right-of-way, to permit the growth of trees within the easement.
- When overhead transmission lines are located within or adjacent to a road right-of-way, there should be sufficient width to permit the growth of trees adjacent to the transmission line, consistent with the applicable operations, maintenance, and safety requirements. The purpose of the landscaping is to divert attention from the overhead lines and, preferably, obscure views of the overhead line from the travelway and adjacent residential areas.
- Permit the use of utility easements for pedestrian and bicycle routes.
 Encourage coordination between utility companies, landowners, pertinent agencies, and the community to ensure that safety, liability, and maintenance issues are adequately addressed.
- Encourage the use of indigenous vegetation that is slow growing and thus minimizes the need to use herbicides for vegetation control.

3.1.4 Relation to Open Space Map and Land Use Map

The following areas shown on the Open Space Map and Land Use Map in Appendix A are components of the regional open space system:

Mountain and Agricultural Areas. Mountain areas, including areas within the State Conservation District, are designated as Preservation and located outside of the Rural Community Boundary. Agricultural lands outside and within the Rural Community Boundary are shown.

Natural Gulches and Drainageways. Gulches and streams outside and within the Rural Community Boundary are indicated for preservation to maintain proper drainage functions.

Shoreline Areas and Parks. Shoreline parks and district parks are shown. Neighborhood parks within the residential areas are not shown.

3.2 AGRICULTURE



Bird of Paradise

Agricultural lands are a key component of the North Shore's rural character and open space. Views of open cultivated fields of green extending to the mountains significantly contribute to the visual qualities of the North Shore. The protection of agricultural lands and agricultural uses is essential to protecting the rural character and scenic open space setting that are so valued by the North Shore residents and visitors.

The following information on agricultural activities on the North Shore is based on an agricultural study conducted in 1997 for the North Shore².

Of the approximately 42,000 acres of land within the State Agricultural District, which extend from just above the Dole Pineapple Pavilion down to Haleiwa and from Mokuleia to Sunset Beach, around 20,000 acres of high-quality agricultural lands are suitable and available for commercial cultivation of crops. Of these 20,000 acres, 12,000 acres in and above Waialua and Haleiwa were released from sugar cultivation, while Dole and Del Monte are growing pineapple on another 7,000 acres of land close to Central Oahu.

The 12,000 acres are owned by two landowners, with Dole Food Company owning half of the 12,000 acres south of Opaeula Stream and Bishop Estate owning the other half north of Opaeula Stream. Both are actively pursuing diversified agriculture. Land is made available to bona fide farmers and former sugar workers, in parcels ranging in size from 1 acre to several hundred acres.

Decision Analysts Hawaii, Inc., North Shore Planning District, Oahu: Agricultural Resources, Situation and Outlook, July 1997.

The release of former sugar lands has created new opportunities for diversified agriculture. The majority of the 12,000 acres of former sugarcane lands have been, or will be, replanted in a variety of crops including coffee, papaya, banana, lychees, mangoes, truck crops, taro, flowers, cattle feed, corn seed, etc. Small-scale commercial forestry has been initiated in the upper elevations where intensive cultivation of crops is not feasible. Because the diversified agriculture industry is still evolving, other agricultural uses suitable to the region may be added in the future.

In general, important agricultural lands include lands designated prime, unique or other by the State ALISH system, rated A or B by the Land Study Bureau (LSB), and which have irrigation sources or other enabling infrastructure. On the North Shore, the most productive agricultural lands are located near or below the Wahiawa Reservoir Ditch. Most of these lands are favorable for cultivation because they are well-drained and generally free of stones; highly rated by the accepted land classification system; nearly level or gently sloping with good machine tillability, deep soils, and adequate sunlight; served by an extensive agriculture infrastructure network already in place (roads, irrigation and power to drive water pumps); and located within reasonable trucking distance to serve local markets and for overseas shipping.

Less productive lands include lands with steep slopes, lands at higher elevations where moisture/irrigation cannot be controlled, and lands with lower-rated soils. These include some of the Mokuleia, Kemoo and Waimea fields and fields in the foothills of the Koolau.

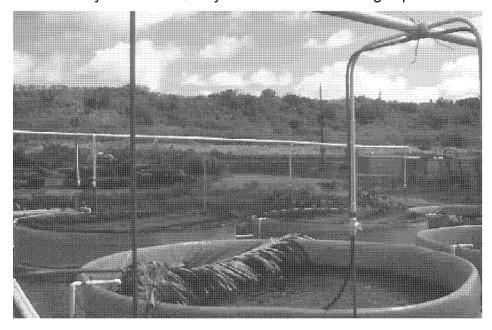
Only some of the agricultural lands outside the former sugarcane lands in Waialua and Haleiwa are suitable and available for farming. Significant acreages of agricultural lands in Mokuleia are owned by Sankyo Tsuho Company, Ltd., which operates a palm tree nursery on a small portion of its lands and leases some acreages for equestrian and limited ranching activities. A number of private landowners own and farm small agricultural lots in Mokuleia, Waialua, Haleiwa, and Pupukea. Obayashi owns the proposed Lihi Lani project above Sunset Beach which will include about 200 acres of marginal agricultural land that will be made available for selected crops and agricultural activities, and agricultural easements will run along the front of its country lots. Of the 225 acres above Sunset Beach owned by Comsat, a majority is leased for grazing, with the balance used for operation of a satellite earth station. GE American Communications, Inc. also operates and maintains a satellite earth station on an adjoining 11-acre property. The Estate of James Campbell owns lands above Sunset Point, some acreages of which are used as a motorcross park. The University of Hawaii maintains two research farms in the region: the Poamoho Agricultural Farm off Kaukonahua Road and the Waialee Livestock Research Farm near Sunset Beach.

It is difficult to identify in advance which crop or crops will succeed and at what magnitude this will occur. Until the various current and future entrepreneurial efforts result in one or more major export crops, it will be important to maintain the availability of land and water for agriculture.

To assure the successful development of diversified agriculture on the North Shore, it is essential that agricultural lands be protected, dedicated, and committed primarily to agricultural use. Exceptions, to be considered on a case-by-case basis, include residential uses if they are permitted under the zoning code, outdoor recreational uses where compatible and appropriate, environmental and educational activities that are resource compatible, and "institutional" uses and environmentally compatible earth stations and communications facilities, which should prove and be developed and operated to maintain compatibility with agricultural uses.

Current impediments to diversified agriculture use or agricultural industry development should be mitigated, minimized, or removed wherever possible. Appropriate incentives for maintaining the long-term availability of important agricultural lands and industry development should be explored, designed, and implemented as high priority action items by pertinent agencies and parties.

Aquaculture. Aquaculture on the North Shore currently exists on the old quarry site near the Dillingham Airfield, some agricultural lots in Mokuleia, along Paalaa Road in Haleiwa, and behind Alluvion in Kawailoa. At Mokuleia, further potential for the expansion of aquacultural activities in the vicinity of the old Quarry site exists and is being explored.



Aquaculture Farm

The North Shore area has significant land and water resources suitable for aquaculture development. However, tightening regulations for water intake, underground injection discharge and direct ocean discharge, may make many sites infeasible from a permit approval and cost perspective.

The aforementioned 1997 agricultural study observed that under current conditions, there appears to be greater existing aquaculture potential in Kahuku rather than the North Shore.

Nevertheless, the City continues to support ongoing efforts by existing small businesses in the region to expand and diversify production and sales of fishes, invertebrates, and plants for food and ornamental tanks. Entrepreneurial activities that could create significant North Shore aquaculture opportunities should be encouraged.

With the transition from fallowed sugar fields to diversified agriculture, agricultural lands and water for aquaculture may become available to support the development of new aquaculture enterprises. Brackish water and marine water resources are also available and may be utilized for aquaculture activities. Keeping existing aquaculture farms viable and expanding the job base will require creative solutions to deal with the complex land use issues, regulations and expenses. Aquaculture offers an economic development alternative that could provide for a more diversified economic base for the North Shore while protecting open space and scenic resources.

Agricultural Support Activities. Agricultural support activities are allowed on Agriculture-designated lands, either as permitted, accessory, or conditional uses, depending on types and intensities of activities. To promote cost-efficient use of existing infrastructure and prevent urbanization of productive agricultural lands, agricultural support facilities should be consolidated in designated areas. These facilities include agriculture-related industrial and commercial uses which support crop production, harvesting, and sales. They may include crop storage, processing, packing, and distribution facilities as well as agriculturally-related administrative, management, marketing, and sales facilities. These facilities should be held distinct from general forms of industrial and commercial uses and should not present hazards or nuisances to adjacent uses. Retail sales from these areas should be incidental to the wholesale activities.



Waialua Mill

While specific agricultural support facilities may require large structures and baseyard operations, overall development of agricultural support areas should relate harmoniously with adjacent commercial, residential or open space areas. Adequate buffer zones will be maintained between agricultural support and residential districts.

The site makai of the Waialua Mill up to the cane haul road and Goodale Avenue/Waialua Beach Road can accommodate 20 to 25 acres of agricultural support uses and is designated as the primary agricultural support area for the region. A secondary area of 10 to 15 acres in Kawailoa near Alluvion Nurseries could accommodate similar support activities for agricultural fields in Kawailoa.

Resource-Based Recreation. Low-intensity, low-impact, resource-sensitive recreation or educational programs and tours of agricultural fields should be allowed where appropriate. These activities could be permitted in areas where they do not interfere with surrounding agricultural uses. Examples of such activities would include biking, horseback riding, hiking, picnicking, tours of agricultural fields, botanical garden, fishponds, and taro fields. Recreational uses involving motorized vehicles and thrill crafts which would adversely impact on-site or adjacent agricultural activities, natural resources, drainage, or runoff patterns would not be compatible uses.

3.2.1 General Policies

The following general policies are applicable to agricultural lands:

- Protect all important agricultural lands, regardless of current crop production capabilities, from uses that would undermine or otherwise irreversibly compromise their agricultural potential and crop production capabilities.
- Implement best management practices in agricultural land use and operations
 to minimize soil erosion and runoff of pesticides, fertilizers, and other nonpoint
 source contaminants into streams, wetlands, and marine habitats. These would
 include erosion control devices, integrated pest management plans, and
 revegetation of disturbed areas.
- Uses such as commercial and industrial development, public or private schools, and residential subdivision with no bona fide agricultural activities should not be allowed on important agricultural lands. Allowable uses may include crop and livestock production and tree farming. Other potentially appropriate uses include recreational or educational programs, or other uses consistent with the character of a rural agricultural area which provide supplemental income necessary to sustain the primary agricultural activity. There should be a direct connection between those activities and the maintenance of agricultural uses on the same or nearby properties.

- While minor or essential crop-specific production support facilities may be located on these lands, major agricultural support facilities should be concentrated at designated agricultural support areas in Waialua or Kawailoa.
- Discourage conversion of agricultural lands to large-lot residential subdivisions
 with no agricultural activities. Residential uses should be permitted if they are
 accessory to agricultural activities. In all such cases, the site's primary use
 should be agricultural and owners or occupants should be actively engaged in
 crop or livestock production.
 - Agricultural subdivisions which include farm dwellings should be clustered. They should be located near similar subdivision or rural communities. Structures on individual sites should be clustered to maximize agricultural production lands and reduce infrastructure costs, wherever possible.
- Identify, evaluate and implement, as an immediate high priority action item at the State and County levels, incentives to support the diversified agriculture industry. Support measures such as incentive-oriented zones and tax policies which promote and facilitate diversified agricultural enterprises.

Consider incentives to encourage landowners to provide affordable long-term leases to farmers. Such incentives may include subdivisions with reduced infrastructure requirements, expeditious processing, or other provisions which reduce the cost of agricultural subdivision and enable tenants to obtain loans or mortgages currently difficult or impossible to obtain without subdivision. If implemented, no farm dwellings or other homes should be allowed in reduced-infrastructure subdivisions.

3.2.2 Planning Principles

The following planning principles seek to preserve and protect agriculture on the North Shore.

- Protect Productive Agricultural Lands. The continued productive use of important agricultural lands, which were previously in sugarcane and are presently in diversified agriculture or pineapple cultivation, should be encouraged.
 - Establish a Rural Community Boundary to protect agricultural lands.
 Outside this boundary, land uses will be limited to agricultural pursuits, outdoor recreation, and preservation.
 - Maintain the existing agricultural infrastructure (irrigation system and roads) to support agriculture on the North Shore.
 - Discourage developing or subdividing of agriculturally designated and zoned lands for residential or other nonagricultural uses.

- Base any subdivision of productive agricultural lands on viable economic units for agricultural production.

Promote Diversified Agriculture on the North Shore.

- The designation of the North Shore as an Enterprise Zone provides tax incentives for the development of agricultural support facilities and, in turn, toward growth of the agriculture industry. Other potential incentives which could lower agricultural land taxes should also be explored.
- Support the development of a property tax system that is supportive of the conversion from traditional (i.e., sugar and pineapple) to diversified agriculture, that recognizes the economic value of different agricultural fields crops, and that provides tax incentives for crops that take a long time to become productive (i.e., tree crops, coffee, etc.).
- Support agricultural research and development activities directed toward increasing operational efficiencies, economic returns, and effective utilization of agricultural lands and supporting infrastructure, which enables sustainable usage of agricultural resources.

Promote the Development of Agricultural Support Facilities.

- All qualified agricultural support uses which meet specific criteria should be allowed on a permit basis within designated agricultural support areas. Examples of qualified uses include:
 - Administration and management of industry operations;
 - Crop processing;
 - Crop and product storage:
 - Agricultural product marketing and sales.

Criteria for such agricultural support uses include the following:

- Uses should be linked to agricultural uses within the region.
- Uses shall be adequately separated from the nearest residential district and meet minimum distance requirements established by the Department of Planning and Permitting.
- Uses or the by-products of such uses shall not present health hazards or nuisance to adjacent areas. Uses should be buffered from adjacent residential uses to adequately minimize noise, light, air pollution, or other environmental disturbances.

- Uses shall meet all State and County standards relating to public health and safety.
- Additional income from small agricultural plots might be gained by providing areas for marketing products locally, such as a farmers' market. A suitable location should be conveniently located in or near Haleiwa or Waialua Towns with adequate space for parking. Efforts to find a permanent site to promote the North Shore Country Market in the Sunset Beach vicinity should be supported.
- Retail activities promoting agricultural products grown on the North Shore could help the agriculture industry. These can include specialty shops, food tasting facilities, restaurants which help market products by featuring crops grown on the North Shore, tours of agricultural manufacturing facilities and other spin-off activities related to diversified agriculture. These facilities should be located in or near Haleiwa or Waialua Towns where they are easily accessible and where adequate parking is available.
- Agriculture wholesale and distribution centers could be established in the region to help market products from the area. In addition, local farmers could provide tours or demonstrations of their operations and have small-scale sales of fresh produce and by-products. These activities should be incidental to agricultural activities and should not interfere with the agricultural use of the site.
- Farmers would benefit from a variety of support facilities such as a vacuum cooling plant and refrigerated storage and a fruit fly disinfestation facility (for crops destined to the U.S. mainland or Japan).
- Processing and packing plants may be needed along with warehouse space to store materials and mechanical garages to maintain equipment. Possible locations for those facilities include the primary agricultural support area at the Waialua Mill, and the secondary agricultural support site in Kawailoa.
- Encourage Aquaculture Uses. Optimize the mix of aquaculture production and service businesses that can technically and economically be located in the North Shore area. Support efforts by small businesses in the region to expand and diversify the aquaculture industry via a variety of integrated aquaculture activities which include education, training and job creation.

3.2.3 Guidelines

The following guidelines carry out the general policies and planning principles for agriculture:

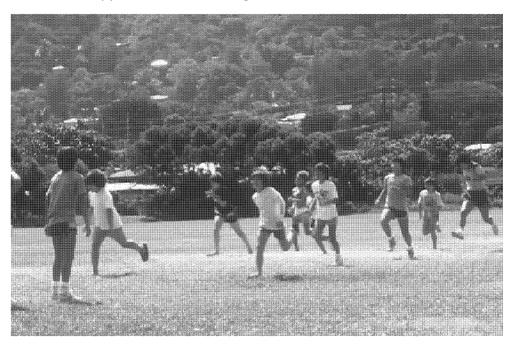
- Support intensive cultivation of arable agricultural lands.
- Allow limited outdoor recreational or other uses, which do not adversely impact on-site or adjacent agricultural activities or other resources. Examples may include camping, horseback riding, hiking, and tours of agricultural lands.
- Permit residential uses if they are accessory to agricultural use. Where dwellings are planned as part of an agricultural use, they should be sited and clustered to preserve open space, maximize the use of productive agricultural lands for agriculture and to reduce infrastructure costs.
- Integrate small-scale agriculture with marketing and/or educational programs for residents and visitors alike. Provide areas for marketing products locally and facilities (pathways and pavilions) where visitors could see products being grown and processed. Possible areas could include the taro and lotus patches in Haleiwa. Farmers should be encouraged to provide tours or demonstrations of their operations and to have small-scale sales of fresh produce and byproducts at the farm. These activities should be incidental to the agricultural activities and must not interfere with the agricultural use of the site.
- Support activities toward development of skills in technology, agriculture and related specialized industries in Waialua so that residents can seek local employment in the area without commuting out of town for jobs. Support a mentor program for teens to learn about agricultural practices, economics, and business so that interest and commitment to agriculture may continue on to future generations.
- Create an agriculture demonstration area showing various crops in different stages of growth and processing. A sugarcane demonstration plot could serve as the "field" exhibit of a future sugar museum.
- Encourage research, training and technology transfer activities to promote the aquaculture industry in the region. Identify potential sites for aquaculture or mariculture parks.
- Design and locate buildings and other facilities that are accessory to an agricultural operation to minimize the visual impact on nearby areas and views from arterial and major collector roads.

3.2.4 Relation to Open Space Map and Land Use Map

Agricultural lands within and outside the Rural Community Boundary are indicated on both maps.

3.3 PARKS AND RECREATION

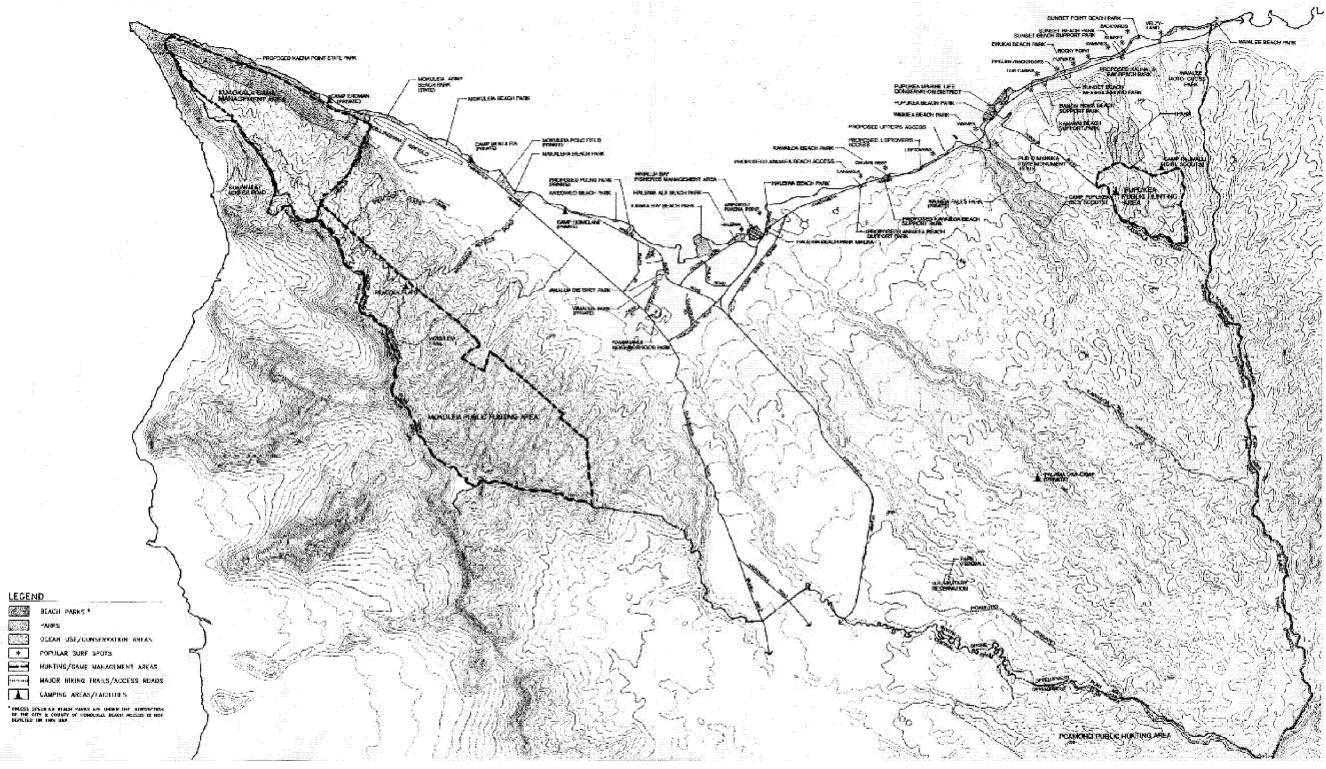
The North Shore area has an abundance of recreational resources and is known by surfers around the world as a surfing capital. Recreational resources are shown in Exhibit 3.2. The City Department of Parks and Recreation and the State Department of Land and Natural Resources, State Parks Division, maintain control of a number of parks and recreational facilities on the North Shore. In addition, several private and quasi-public organizations provide recreational opportunities in the region.



City and County Park

• City and County Parks. The City Department of Parks and Recreation (DPR) classifies parks according to two basic categories: "island-based parks" and "community-based parks." Island-based parks serve the needs of the islandwide population. The DPR standard for islandwide parks is eight acres per 1,000 population. They include regional parks, beach/shoreline parks, beach/shoreline right-of-ways, botanical gardens, golf courses, and zoological parks. The size of the park and the facilities to be provided are based on the character of the site, intended use, and availability. The only types of island-based parks on the North Shore are beach/shoreline parks and right-of-ways. Existing DPR beach/shoreline parks on the North Shore are shown in Table 3-1. Existing park facilities and right-of-ways to beach parks are listed in the Index of Oahu Parks and Facilities (Department of Parks and Recreation, April 1997).

Exhibit 3.2 Recreational Resources



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Table 3-1 DPR Beach Parks on the North Shore			
<u>Park</u>	<u>Acreage</u>		
Mokuleia Beach Park*	38.49		
Makaleha Beach Park*	27.72		
Aweoweo Beach Park*	1.43		
Kaiaka Bay Beach Park	52.83		
Haleiwa Alii Beach Park	19.25		
Haleiwa Beach Park	15.67		
Kawailoa Beach Park	0.39		
Waimea Bay Beach Park	22.16		
Pupukea Beach Park	36.57		
Banzai Rock Support Park	2.31		
Ehukai Beach Park	1.21		
Sunset Beach Park	17.73		
Sunset Beach Support Park	2.06		
Sunset Point Beach Park	0.93		
Waialee Beach Park*	25.65		

^{*} Improvements are proposed at these beach parks which currently lack facilities. Camping facilities are planned for Waialee Beach Park.

Kaunala Beach Park, Laniakea Beach Support Park, Kawailoa Beach Support Park, Leftovers Beach Park, Uppers Beach Park, and Kahawai Beach Support Park are planned additions to the DPR park system. In addition, the City maintains a number of right-of-ways which provide access to the shoreline.

Community-based parks are intended to provide for active recreation and consist of Neighborhood, Community and District parks. The DPR standard for community-based parks is 2 acres per 1,000 people, although this may vary according to each region's situation. Community-based parks provide courts and playing fields for various sports and serve a wide array of active sports leagues. Existing community-based parks on the North Shore are Kamananui Neighborhood Park, Sunset Beach Neighborhood Park, and Waialua District Park. To expand active recreational opportunities in the region, a couple of island-based beach parks, such as Haleiwa and Pupukea Beach parks, are equipped with ballparks.

According to the Department of Parks and Recreation, there is currently a shortage of community-based parks in the North Shore DP area. Based on projected population for the year 2020, it is anticipated that there will be a need for an additional community park (average 10 acres) and two additional neighborhood parks (average 4 to 6 acres) for the North Shore. The DPR has identified Aweoweo, Haleiwa Beach Park Mauka (commonly referred to as Haleiwa Regional Park), and Puuiki Park as potential community-based parks to address the shortage of these parks on the North Shore.

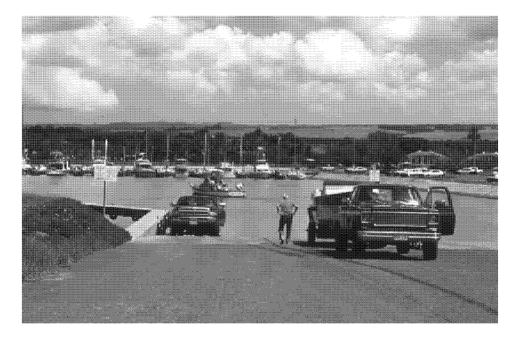
There are no existing or planned public golf courses on the North Shore.

• State Parks. The State Department of Land and Natural Resources (DLNR) manages two parks in the area: Kaena Point State Park and Puu o Mahuka Heiau State Monument. The Kaena Point State Park extends from Dillingham Airfield around Kaena Point to Makua Valley on the west side of the Waianae Range. It is located at the end of Farrington Highway on 779 acres of land. The park offers opportunities for picnicking and shore fishing along a relatively remote wilderness coastline. Puu o Mahuka Heiau State Monument is situated on 5.7 acres overlooking Waimea Bay Beach Park off Pupukea Road. A lowwalled, platform-type temple with two adjoining structures, it is Oahu's largest heiau. It is the reputed sacrifice site of Captain George Vancouver's watering party of 1793.



Kaena Point

State-owned and operated recreational boat harbor facility in the North Shore region. The facility is currently managed by DLNR. The facility is located in Waialua Bay and contains approximately 7.4 acres of protected water. There is a 600-foot-long, 120-foot-wide, 12-foot-deep entrance channel that provides access to two inner basins. A two-lane boat launching ramp is located on the west side of the harbor and a harbor master's office is also on the premises. The harbor contains 63 berthing spaces and 15 other mooring spaces. There is a demand for these spaces; the current waiting list contains approximately 50 people and the waiting period is about 6 years. The *Haleiwa Boat Harbor Development Study* of 1970 envisioned a 220-slip capacity.



Haleiwa Boat Harbor

Since 1970, however, the envisioned slip capacity of the harbor will likely be reduced due to the provisions for slips to accommodate larger vessels. Additional slips to meet user demand will require the construction of additional docks. The Harbor Study should be updated to address current and projected boating needs on the North Shore.

Since this is the only boat launching facility on the North Shore, the harbor plays an important role in meeting the demand for protected berthings and moorings to facilitate recreational and commercial fishing pursuits. It also provides facilities for trailer boating needs.

• Institutional and Private Facilities. The YMCA has private facilities at Camp Erdman in Mokuleia which provide educational and recreational activities. Other quasi-public recreation facilities include the A. Wallace Scout Reserve, Camp Palama Uka, Camp Paumalu, and Camp Pupukea that are used primarily as Scout Camps. The Mokuleia Polo Field, Cannon Pony Farm, Camp Homelani, and Camp Mokuleia are also located in the North Shore area.



Camp Pupukea

Waimea Falls Park is a private recreation facility which hosts approximately 600,000 visitors per year. Situated on a 1,800-acre parcel in Waimea Valley, the Park has a visitor center, shops, restaurant, arboretum, botanical gardens, educational resources, Hawaiian cultural preservation areas, and hiking trails. The Park's master plan includes expanded gardens, camp sites, access improvements, office and maintenance space.

3.3.1 General Policies

The following general policies relate to parks and recreational resources for the North Shore.

 Provide safe, suitable sites and facilities for a variety of recreational activities on the North Shore. Existing recreational resources should be protected and enhanced. Recreational opportunities should be expanded by providing greater access to recreational resources in the mountains, at the shoreline and in the ocean. As opportunities occur, acquire additional shoreline sites for beach park development.

- Maintain and improve recreational areas and facilities to provide high quality recreational experiences for residents and visitors.
- Promote recreational activities that are compatible with the preservation of open space, rural character, scenic resources, and environmental quality. Wilderness and wildlife activities should be explored and promoted if appropriate.

3.3.2 Planning Principles

The general policies for parks and recreational resources are supported by the following principles:

- Environmental Compatibility. Uses that generate high noise levels should be located and operated in a way that keeps noise to an acceptable level in existing and planned residential areas. The built environment should avoid adverse impacts on natural resources or processes in the coastal zone or any other environmentally sensitive areas. Expansive recreational uses, such as golf courses, should be designed to minimize environmental impacts. To retain a sense of place, the design of recreation areas should incorporate natural or cultural features of the site and use landscape materials that are indigenous to the area where feasible.
- Community Integration. The design of recreational attractions may create
 distinct identities and entry features for a particular site. However, there should
 be elements that link these sites with surrounding areas through the use of
 connecting roadways, bikeways, walkways, horse-riding trails, landscape
 features or architectural design. Parks created for regional or islandwide uses
 should be located along or near regional roadways.
- Appropriate Scale and Siting. Architectural elements and siting of recreational facilities should be appropriate to the rural character and to natural and historic elements of its surrounding environment. Park sites host predominantly outdoor forms of recreation. However, public recreation buildings may also be allowed if deemed appropriate by a public recreation agency. Community-based parks which emphasize intensive use and recreation facility development such as ballfields, playing courts, or buildings should be located in or near the communities they serve. Parks developed at or adjacent to significant natural resources should emphasize the qualities or opportunities of the resource or setting.

3.3.3 Guidelines

The following guidelines implement the general policies and planning principles for the recreational resources listed above.

3.3.3.1 Parks, Recreation Areas, and Facilities

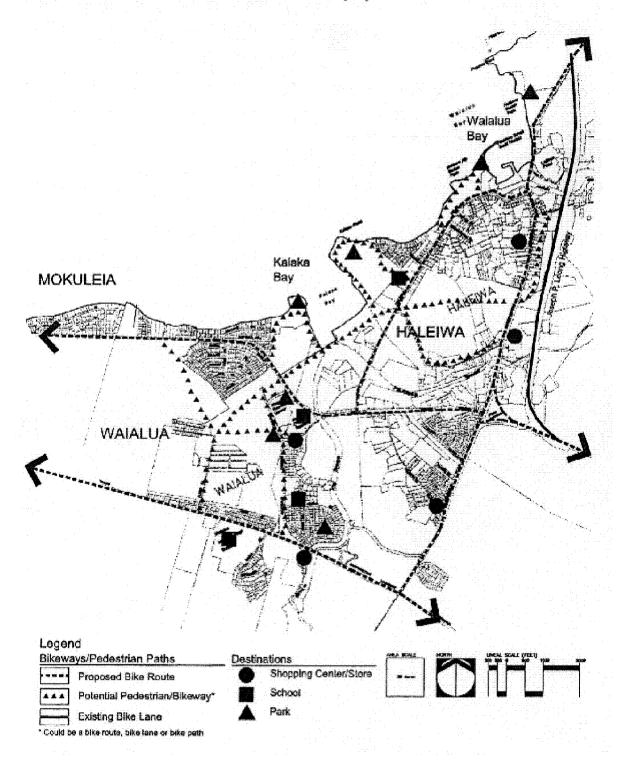
- Provide additional parks and facilities to meet resident and islandwide recreational needs for a variety of recreational activities, including both facility based recreational activities (ballcourts, playgrounds, etc.) and resource-based recreational activities (mauka mountain resources, ocean resources, etc.).
- Develop Aweoweo Park and Haleiwa Beach Park Mauka (commonly referred to as Haleiwa Regional Park) as community-based parks to expand active recreational facilities for the North Shore residents. A skate park is proposed at Haleiwa Beach Park Mauka to accommodate the demand for in-line skating and skateboarding facilities within the region. When feasible, acquire Puuiki Park for community use.
- If new residential development occurs, it should provide land for open space and recreation purposes at a minimum of two acres per 1,000 residents. Community-based parks (and associated service radius) include miniparks (1/4 mile), neighborhood parks (1/2 mile), community parks (one mile), and district parks (two miles).
- Expand public access to the upland or mauka areas for appropriate types of recreational activities that are low-impact, resource-sensitive and do not compromise significant environmental resources and important agricultural activities. These would include nature-based activities such as picnicking, camping, hiking, hunting and the appreciation of scenic, natural and cultural resources.
- Acquire and maintain public and/or private campgrounds and hiking trails in the mauka areas. Develop a system of mauka trails and paths to interconnect the major recreational areas of the North Shore for use by non-motorized transportation modes, e.g., walking, biking, horseback riding.
- Support equine activities through a variety of means, including establishment of
 well-designed, safe riding trail networks linking destinations in the rural
 communities and in the mauka areas that have long been used by riders.
 Cooperative agreements for the development and maintenance of such
 networks should be forged through public-private partnerships. Explore the
 potential of equestrian activities, such as trail rides and riding adventures, as an
 adjunct to the area's attractions.

- Coordinate planned private and public actions pertaining to trails and access.
 Identify historic trails and old government roads of cultural and recreational value to the public.
- Acquire additional coastal lands for beach park use in proximity to popular surfing and coastal recreation sites.
- Limit developments along the shoreline to parks and other compatible open space uses.
- Improve and expand public access to beaches by providing public access no more than 1/2-mile apart in undeveloped areas and no more than 1/4-mile apart in developed areas. Establish access at closer intervals where justified by public demand, traditional use patterns, high quality recreational resources, barriers that exist along the shoreline, and land development patterns or natural features.
- Provide more youth activities, programs and facilities on the North Shore.
- Provide an integrated system of pedestrian paths/bikeways linking the parks, schools, and town centers in Haleiwa and Waialua, as shown in Exhibit 3.3.
 Bikeway development should be coordinated between pertinent State and City agencies and private landowners to ensure that safety, liability, and a mixture of use issues are adequately addressed.
- Minimize environmental impacts (such as siltation, pesticide and fertilizer runoff)
 of recreational facilities. Expansive recreational facilities, such as regional
 parks and golf courses, should comply with State Department of Health
 guidelines related to ground and nearshore water quality.

3.3.3.2 Maintenance of Parks and Recreation Areas

- Ensure that existing parks are adequately developed and maintained to support their intended functions.
- Provide adequate public parking and related support facilities (such as rest rooms and showers) at popular beach parks, including lifeguard equipment storage facilities in anticipation of increased lifeguard services needed at those parks. Improvements are planned for North Shore beach parks at Laniakea, Leftovers, Uppers, Kahawai, and Haleiwa.
- Limit beach park and nearshore ocean area uses to that which helps preserve overall environmental quality, rural character, scenic views, and open space.

EXHIBIT 3.3Proposed Waialua-Haleiwa Pedestrian/Bikeway System



3.3.3.3 Site Design of Recreational Facilities

- Incorporate natural features and use landscape materials that are indigenous to the area, where feasible, into the design of recreation areas.
- Locate community and neighborhood parks in or adjacent to neighborhoods or communities, in order to maximize accessibility.
- Design and site park improvements and landscaping in such a way as to create or add to the aesthetic value of open space elements and natural resources.
- Provide pedestrian and bicycle pathways from surrounding streets to parks, to facilitate convenient access to the parks.

3.3.3.4 Management of Recreational Resources

- Identify carrying capacity limitations on recreational resources and implement policies to regulate and mitigate impacts to these resources.
- Regulate and enforce rules and regulations to mitigate conflicts between recreational activities.

3.3.3.5 Recreational Activities that Support the North Shore's Economy

- Promote recreational and specialty events such as surf meets, fishing tournaments, bike tours, races and other competitions which contribute to the North Shore's economy. Such events shall meet State and City rules and regulations for park and ocean uses to avoid conflict with recreational uses.
- Manage impacts to the recreational resource and surrounding communities (such as noise, parking, traffic, etc.) associated with special events.
- Promote instructional programs, training clinics and other activities that cater to the health and recreation industry and which will not impact the North Shore's rural character.

3.3.4 Relation to Open Space Map and Land Use Map

Major park sites are shown on the Open Space Map in Appendix A. While smaller neighborhood or support parks are not mapped, they are included in Exhibit 3.2 and cited where appropriate in the *Sustainable* Communities Plan text.

3.4 HISTORIC AND CULTURAL RESOURCES

The Hawaiian concept of land division is based upon the access and use of resources from the mountain peaks to the shoreline, known as ahupua'a. In traditional Hawaiian culture, the ahupua'a provided the principle physical and social structure for the society. It recognizes the close relationship between land-based and marine-based natural resources, and it is a useful concept for managing the natural environment.

The North Shore *Sustainable* Communities Plan area contains the ahupua'a of Waialee, Kaunala, Paumalu, Pupukea, Waimea, Kawailoa, Helemano, Paalaa, Kamananui, Mokuleia, Kawaihapai, Kealia, Kuaokala, and Kaena. It spans two moku—Waialua and Koolau Loa. While the communities in the various ahupua'a may be diverse, they share a common desire to preserve the natural, cultural and historical heritage of the region.

The North Shore contains several different types of historic and cultural sites and resources which are representative of its precontact, early history, and plantation eras. These sites and features are valuable as historic records and cultural resources. Table 3-2 lists historic features that are listed on the National and State Register of Historic Places. In addition to these, the State Historic Preservation Division's maps and inventory of significant historic and cultural features and the inventory maintained by the Oahu Burial Council list additional sites which may merit protection. These sources may be consulted for further information.



Waialua Courthouse

Table 3-2
National and State Register of Historic Places

Tax Map Key	Site Name	Site Number	Hawaii Register	National Register
5-8-01:15, 55	Kalou Fishpond	80-01-257	1/30/81	
5-9-05:68	Puu o Mahuka Heiau	80-01-249	1/29/81	12/29/62 1996 NHL
6-6-13:12 (Portion)	Haleiwa Elementary School	80-04-1348	5/3/80	8/11/80
6-1-05:16	Kupopolo Heiau	80-01-241	9/5/78	6/4/73
6-2-01:02	Haleiwa Beach Park	80-14-1388	6/9/88	
6-6-07:07	Pohaku Lanai	80-04-226	11/26/86	
6-6-09:23	Waialua Courthouse	80-04-1334	2/20/79	
6-6-13:03 (Portion)	Waialua Fire Station	80-14-1346	7/19/80	12/2/80
-9-02:06, 09	Kaena Complex	80-03-1183	6/9/88	

3.4.1 General Policies

The following are general policies for historic and cultural resources.

- Emphasize physical references to North Shore's history and cultural roots to help foster the area's unique sense of place.
- Protect existing visual landmarks and support the creation of new, culturally appropriate landmarks.
- Preserve significant historic features from earlier periods.
- Retain, whenever possible, significant vistas associated with archaeological features.
- Respect significant historic resources by applying appropriate management policies and practices. Such practices may range from total preservation to integration with contemporary uses.
- Restore or keep intact sites with cultural and/or religious significance out of respect for their inherent cultural and religious values.

3.4.2 Planning Principles

The treatment of a particular historic or cultural site should depend upon its characteristics and potential value. The following planning principles should be used to determine appropriate treatment:

- Preservation and Protection. Recommend in situ preservation and appropriate protection measures for sites that have high preservation value because of their good condition or unique, historic, cultural, and archaeological features.
- Compatible Setting. Determine the appropriate treatment for a historic site by
 the particular qualities of the site and its relationship to its physical surroundings.
 The context of a historic site is usually a significant part of its value, and care
 should be taken in the planning and design of adjacent uses to avoid conflicts
 or abrupt contrasts that detract from or destroy the physical integrity and historic
 or cultural value of the site.
- Accessibility. Determine the degree of access that would best promote the
 preservation of the historic, cultural, and educational value of the site,
 recognizing that economic use is sometimes the only feasible way to preserve
 a site. Public access to a historic site can take many forms, from direct physical
 contact and use to limited visual contact. In some cases, however, it may be
 highly advisable to restrict access to protect the physical integrity or sacred
 value of the site.

3.4.3 Guidelines

Guidelines for native Hawaiian cultural and archaeological sites that implement the general policies and planning principles are presented below. In addition to these resources, the Haleiwa Special District and Waialua Town are historic and cultural resources. Guidelines for these resources are included in Section 3.6.3 on Commercial Areas.

- Require preservation in situ only for those features which the State Historic Preservation Officer has recommended such treatment.
- Determine the following on a site-by-site basis in consultation with the State Historic Preservation Officer:
 - appropriate preservation methods;
 - appropriate delineation of site boundaries and setbacks: and
 - appropriate restrictions on uses and development of adjacent lands.
- Include input from all pertinent community resources in the development of a site preservation plan.

- Include sight lines and view planes that are significant to the original purpose and value of the site in criteria for adjacent use restrictions.
- Determine the appropriateness of public access on a site-by-site basis in consultation with the State Historic Preservation Officer, Hawaiian cultural organizations, and the owner of the land on which the site is located.

3.5 RESIDENTIAL COMMUNITIES

Vital, contemporary communities oriented toward meeting the needs of their residents often offer a network of amenities to facilitate and enhance individual, family, and community life. At their best, they may offer parks and landscaped public open spaces, churches, community centers, and other places for social and civic functions, residences or other facilities for persons with special needs, and safe, pleasant bicycle and pedestrian connections that link homes and important destinations. While this plan refrains from prescribing what the specific ingredients of any given community should be, it takes this opportunity to cite the need, in each community, for appropriate elements which aid and enhance the overall quality of life of the community.

The Rural Community Boundary is intended to contain the spread of development into significant agriculture and preservation areas. The need for additional housing on the North Shore will be met primarily by "infill" development of existing vacant lands within the Rural Community Boundary.

Within the Rural Community Boundary, there is ample capacity to accommodate anticipated residential development to the year 2020. A total of 1,300 units can be accommodated within the Rural Community Boundary, assuming all the vacant lands that are designated Rural, Rural Residential and Low Density Apartment are built out. Of this 1,300-unit capacity, 1,100 units were previously approved: approximately 770 units (including Lihi Lani) in Pupukea/Sunset, 150 in Haleiwa, and 60 each in Kawailoa, Waialua and Mokuleia. A majority of the vacant lots in Sunset/Pupukea and a portion of the Haleiwa potential housing stock are country-zoned lots.

To meet existing and future housing needs expressed by residents in Waialua and Haleiwa, the region with the highest level of crowding and where the North Shore *Sustainable* Communities Plan directs future growth in population and employment, limited residential expansion of up to 200 units is proposed in Haleiwa and Waialua adjacent to existing built-up areas. Including these newly designated residential areas, the vacant lands that are designated for housing within the Rural Community Boundary will have a total capacity of 1,300 units at build-out.

It should be noted that it is unlikely that all the 1,300 potential units will be built out, as development occurs at different rates in response to changing market conditions. Further, housing development on the North Shore is constrained by infrastructure adequacy. However, in the unlikely event that all the potential units are built out over the next 20 years, the potential

population for the year 2020 will still be within the General Plan population guidelines of 1.8 percent of the islandwide population for the North Shore.

Nevertheless, the long-term cumulative impact of incremental intensification in existing built-up neighborhoods through infill and home expansion could adversely affect the character of existing neighborhoods, in the absence of effective residential lot and subdivision design and development standards that distinguish rural from urban development. The following policies and guidelines are intended to promote rural character in residential development on the North Shore

3.5.1 General Policies

The following general policies are intended primarily to maintain and promote rural character in existing and new residential development:

- Provide sufficient capacity within the Rural Community Boundary to accommodate existing and future housing needs.
- Direct future residential development to Haleiwa and Waialua.
- Preserve and protect the rural character and natural features and setting of the North Shore by establishing "rural" forms of development and subdivision standards, in contrast to existing urban standards. Require development in these areas to be sensitive to and have minimal impact on the area's rural character.
- Encourage creative site and housing design options to achieve site planning flexibility, creative site utilization, creation of internal open spaces, and achievement of rural character
- Respond to the special needs of an aging population by providing housing for a variety of living accommodations which are affordable to low- and moderateincome, gap group, and other elderly households; such as multi-generation households, group homes, assisted living units, and continuing care retirement communities.

3.5.2 Planning Principles

To implement the general policies for residential community development that will achieve the desired rural character, planning principles include the following:

• Overall Density. Table 3-3 gives an overview of the density and height guidelines for planned and existing residential developments. Conceptual locations for Rural, Rural Residential, and Low-Density Apartment residential areas are shown on the Land Use Map in Appendix A.

Table 3-3
Density and Height Guidelines by Residential Density Category

Residential Category	Density (Housing Units)	Building Height
Rural	1 unit/acre	not over two stories/25 feet
Rural Residential	5-8 units/acre	not over two stories/25 feet
Low-Density Apartment	10-20 units/acre	not over three stories/40 feet

- Rural Development Standards. Adopt rural development standards and guidelines that provide appropriate building envelope and setback requirements (smaller building footprints), roadway, streetscape, and drainage standards (grassed swales in place of concrete sidewalks, curbs and gutters), and landscaping.
- Compact Development. Promote compact development by concentrating
 housing and community activities in or adjacent to existing built areas, to
 preserve agricultural resources, open space, views and natural resources which
 characterize the rural landscape. These forms of development also provide for
 more cost-effective and efficient infrastructure development and are more
 conducive to alternative modes of transportation such as biking and walking.
- Physical Definition of Neighborhoods. The boundaries of neighborhoods should be defined by open space, landscaping or natural features. The focus of neighborhood activity should be on local streets, common pedestrian rights-ofway or internal recreational areas.
- **Bicycle and Pedestrian-Oriented Residential Streets.** Provide safe streets for walking and biking between and within communities. Pedestrian and bicycle travel should be encouraged, particularly to reach neighborhood destinations such as schools, parks and convenience stores.

3.5.3 Guidelines

Except for pockets of existing apartment districts in Mokuleia, almost all the housing in the North Shore consists of rural residential areas. Some of these areas typically exhibit the physical characteristics of a rural context, including:

- Smaller lot coverage and larger setbacks than encountered in more urbanized areas;
- Low-rise structures, generally not exceeding two stories;
- Relatively narrow roadway widths;

- Use of grassed swales rather than curbs and gutters; and
- Rurally-oriented landscaping.

This plan recognizes three categories of residential development: Rural, Rural Residential, and Low-Density Apartment. Guidelines for these areas are as follows:

3.5.3.1 Rural

This category consists of single-family homes on relatively large lots, e.g., lots of one acre or more. Development is low intensity and generally consists of a single-family home, ancillary structures if necessary, low site coverage, and a large predominance of landscaped open space.



Country Home in Pupukea

This designation allows agricultural activities and can also serve as a land use transition from the more densely developed rural residential neighborhoods to agricultural uses. Rural areas on the North Shore are within the Rural Community Boundary and consist of existing country-zoned lands and a few infill parcels in Sunset Hills, Pupukea, Lihi Lani, and parts of Haleiwa. Open landscapes such as fields or tree cover and largely unobstructed views and rural roadways are the principal visual qualities of these communities. As there is sufficient capacity on existing Country-zoned lands within the North Shore *Sustainable* Communities Plan, no new Country lots are proposed for the North Shore.

• Density is 1 unit per acre with lots ranging in size from 1 to 3 acres. Buildings should not exceed two stories or 25 feet, although the height may vary according to required flood elevation, slope, and roof form.

- Agricultural subdivision standards currently apply to country-zoned lands.
 Continue to use rural development standards for buildings, roadway, and other
 infrastructure that result in visual as well as physical predominance of open
 space and country character. The site design should incorporate rural standards
 for roadways, generous setbacks, and low lot coverage.
- Locate and configure utility structures so that they do not visually dominate major community approaches, roadways, or views.
- Ensure compatibility between country-district uses and adjacent agricultural lands, natural resources, views, or cultural features.

3.5.3.2 Rural Residential



Rural Residential Home in Waialua

This category is intended to describe the bulk of existing and new residential developments located within the Rural Community Boundary. These areas consist of single-family homes in rural settings. Typical residential lot sizes range from just less than one acre to about one-eighth acre. Alternate development forms which result in greater amounts of open space and common facilities may also be used.

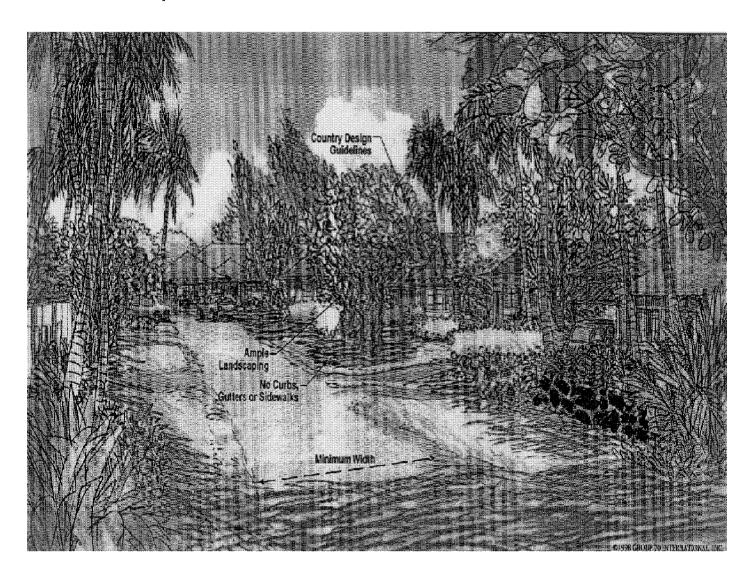
A majority of the homes on the North Shore consist of low-density one- and two-story single-family attached and/or detached dwellings, ranging in size from 5,000-square-foot lots to 20,000-square-foot lots. New residential single-family development may occur through infill development on existing residential-zoned vacant lots in the region, or in areas designated for new residential development in Waialua and Haleiwa. Up to 200 units can be accommodated in the new housing areas in Waialua and Haleiwa; up to 150 units between Puuiki Road and Goodale Avenue; and up to 50 units north of Paalaa Road, respectively.

The expanded residential areas in Waialua and Haleiwa are intended to respond to housing needs expressed by Waialua and Haleiwa residents and anticipated long-term job growth related to diversified agriculture and other industries. While both areas have more capacity than the 200 units proposed, it is assumed that not all of the acreage would be developable for housing due to topographical, drainage, and utility concerns. The intent is not to promote larger lots, which may make them unaffordable to area residents, or may encourage sprawl, but to allow for more site flexibility, integration of open space and neighborhood park, and a joint infrastructure system for cost efficiency.

The intent of the Rural Residential designation is to distinguish rural from urban residential development. It is anticipated that Rural Residential will carry development standards for roadways, building envelope, or other features that will convey rural rather than urban character. Although existing residential districts islandwide generally allow for a range of 3,500- to 20,000-square-foot lots (2 to 10 or 12 units per acre), the new rural residential areas in Haleiwa and Waialua are intended to support 5,000-square-foot to 10,000-square-foot lots, so that they remain affordable and at the same time maintain the rural character, by adhering to the following guidelines:

- Densities should range from 5 to 8 units per acre, or up to 10 units per acre for alternative development options which enhance rural character and maximize consolidated, usable open space. Lot sizes should range from 5,000 square feet to 10,000 square feet, allowing the application of optional design standards. For smaller lot developments of less than 5,000 square feet, alternative clustering should be encouraged.
- Ruraldevelopment standards which encourage appropriate scale and character through the use of smaller building footprints, greater setbacks, and more landscaping (use of hedges to create walls and grassed front yards, and rural roadways with no sidewalk, curbs, and gutters) should be used to guide planning and design (Exhibit 3.4).
- The site design for small-lot developments should avoid monotonous rows of garages and driveways along neighborhood street frontages by employing features such as varied building setbacks and shared driveways.
- New or infill housing development, as well as modifications to existing homes, should be generally compatible with the predominant form of existing homes on adjacent properties and with the neighborhood as a whole.
- Buildings should provide visual interest and individual identity by using pitched roofs in varied forms, exterior colors and finishes, building orientation, floor plans and architectural details. In general, buildings should not exceed two stories or 25 feet, although the height may vary in response to required flood elevation, slope, or other physical site constraints.

Exhibit 3.4 Rural Residential Development



3.5.3.3 Low-Density Apartment

This category consists of predominately two-to four-story townhouse complexes, stacked flats, or low-rise apartment buildings. These areas are confined to existing apartments in Mokuleia, Haleiwa and Waialua. The district in Mokuleia consist of small single-family homes, and the only apartment-zoned area on the North Shore consists of two-, three- and four-story walk-up apartments. The existing apartment-zoned districts are recognized, but no new apartment districts in Mokuleia is planned for the North Shore.

- Maintain the existing apartment district boundaries at currently zoned scale and density.
- Densities range from 10 to 20 units per acre. Buildings should not exceed 40 feet in height.
- Where possible, enhance compatibility of apartment district uses with adjacent uses.
- Building form, orientation, location of entries and landscape screening should be employed to maintain a sense of residential scale and provide greater privacy and individual identity for housing units.
- Building scale, roof form and the quality of materials should be compatible with those of adjacent low-density residential areas.

3.5.3.4 Special Needs Housing

Special needs housing does not indicate a specific housing or building type. Rather it refers to facilities designed for certain segments of the population with special living requirements. Categories of special needs groups include low- and moderate-income sectors, senior citizens, disabled people, and people with health problems or the need for other forms of special care. Often such housing includes special features, such as congregate dining and social rooms; laundry, housekeeping and personal assistance services; shuttle bus services for residents; and skilled nursing beds or physical therapy clinics. Special needs housing should be located in close proximity to transit services and commercial centers.

- Special needs housing should be located within or near Haleiwa or Waialua towns. They should be located within close proximity to public transit, community services and commercial activities.
- As an exception to standard density situations, special needs housing may have densities of up to 20 units per acre, not including beds in skilled nursing facilities, if they consist primarily of smaller dwelling units with residential scale and character. Proposals for special needs housing should be subject to community and agency review.

- Building heights should be limited to 25 feet, in line with the region's rural character.
- Ensure compatibility of building scale, roof form, and materials with adjacent residential areas.

3.5.4 Relation to Land Use Map

Residential areas are shown conceptually on the Land Use Map in Appendix A as follows:

Rural. This land use designation covers large lot residential development with lots ranging in size from 1 acre to 3 acres and includes lands generally consistent with the Country district of the City's Land Use Ordinance (LUO).

<u>Rural Residential</u>. This land use designation provides for the dominant housing form on the North Shore which consists of single-family detached dwellings on lot sizes ranging from 5,000 square feet to 10,000 square feet.

<u>Low-Density Apartment</u>. Concentrated primarily in Mokuleia, apartment areas are recognized where they occur as a preexisting zoned use, but they are not designated on the Land Use Map. No new apartment areas are planned.

<u>Special Needs Housing</u>. This land use is not specifically designated on the Land Use Map, but it is allowed in residential areas subject to project-by-project review for compatibility with surrounding uses.

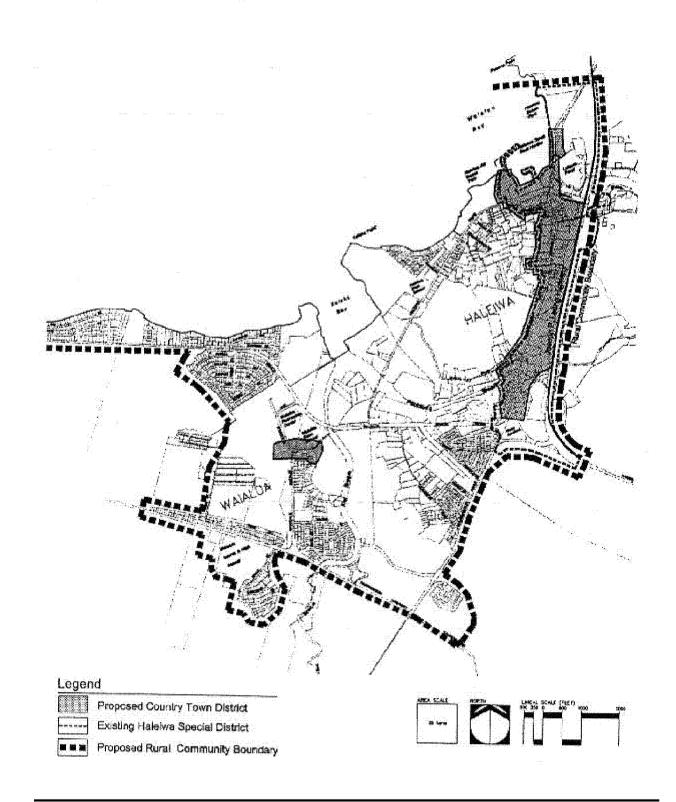
Nonresidential uses that are not specifically designated on the Land Use Map but are allowed in all residential areas include: elementary schools, parks, churches, community centers, child care centers, and other public facility and utility uses serving the area. It should be noted that some of these uses do require project review and issuance of permits before they can be developed within a residential area.

3.6 COMMERCIAL AREAS

A variety of commercial areas are present throughout the North Shore. These vary in size and type from small, individual, freestanding stores, groups of small stores along a main street in Haleiwa and Waialua, to small commercial centers. For purposes of this *Sustainable* Communities Plan, the various types of commercial uses are defined and designated in three categories: Country Town, Rural Community Commercial Center, and Country Store.

• Country Towns (Exhibit 3.5). Country towns are generally distinguishable from their larger, often newer, urban counterparts by their compactness, small scale, and mixture of different land uses located in close proximity to each other. Buildings are usually one to two stories in height and built to the property line. Commercial activity is often along the street frontage or in similar "Main Street" settings. Rural communities often take their identities from the character of their particular town center.

Exhibit 3.5 Haleiwa and Waialua Country Towns



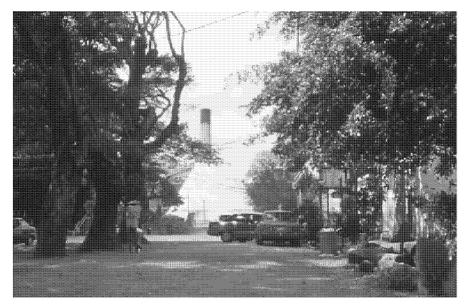
The Country Town districts for Haleiwa and Waialua identify the general area where commercial establishments as well as public services and civic activities are concentrated. Haleiwa serves as the region's primary commercial attraction. Waialua Town's commercial area provides Waialua and Mokuleia residents with convenient goods and services at a rural community scale and character. Although both are designated similarly as country towns, they have their own distinct attributes and character and are discussed separately below.

Haleiwa. Situated along Kamehameha Highway between Haleiwa Beach Park and Weed Circle, the town serves as gateway to the North Shore as well as the region's major commercial center and attraction for visitors. The Anahulu Stream Bridge and Pacific Ocean are distinct physical elements that enhance the sense of character of Haleiwa Town. The Koolau and Waianae Mountain Ranges and agricultural areas encircling the town present the image of a town surrounded by agriculture and open space. The boundary for the Haleiwa Country Town is generally coterminous with the Haleiwa Special District, except for agricultural areas adjacent to Weed Circle, Haleiwa Beach Park, Haleiwa Beach Park Mauka, and Loko Ea Pond which will remain outside the Country Town district. Current land uses within the Country Town district include a wide range of retail stores, restaurants, specialty shops, service establishments and professional offices. The continued success of Haleiwa as a town center and visitor attraction will be dependent on its ability to preserve its rural town character while accommodating economic development and growth.



Haleiwa Town

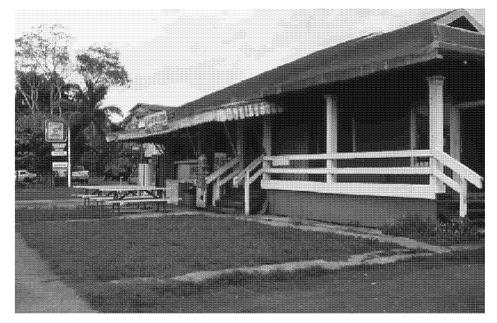
Waialua. Waialua is a plantation town oriented around the existing Waialua Mill site. The town core is concentrated around the existing shopping center and Dole office buildings and consists of shopping and civic facilities surrounded by residential neighborhoods, many of which are remnants of the old plantation camps. As proposed, its nucleus, centered around the intersection of Goodale Avenue and Kealohanui Street, is anchored by the old Bank of Hawaii Building, the Waialua Library, and the Waialua Park which helps to form an entrance to the Waialua Mill site. With the closing of the Waialua Sugar Company in 1996, Waialua's future lies in strengthening its residential communities, retaining and highlighting the rich social, cultural and industrial heritage associated with the plantation industry, establishing agricultural support businesses as part of the overall development of diversified agricultural industry, promoting technology training within its schools and community, and revitalizing its town core through economic development that is compatible with the rural character of this community.



Wailua Town

• Rural Community Commercial Center. The rural community commercial center is a small cluster of commercial and service businesses which service primarily the immediate community. Since most are located along highways, these centers also attract visitors and residents from outside the immediate community. These commercial establishments may include grocery stores, sundries stores, or other services and shops catering to residents and visitors to the region. They are generally one- to two-story in height and equivalent in size to neighborhood grocery stores. Located on major thoroughfares, these centers provide a range of goods and services to meet the needs of surrounding residential communities and visitors to the North Shore. The area between Foodland market and the adjacent commercially zoned properties between Pupukea Road and Pahoa Road is designated as a Rural Community Commercial Center.

country Store. This category generally refers to isolated, freestanding retail or eating establishments located on commercially zoned lands or which exist as legally nonconforming uses. Its purpose is to recognize such establishments and to provide guidance for renovation, reconstruction, or minor expansion of these facilities. It is not intended to provide for new country stores. Existing country stores include stand-alone retail or eating establishments on Commercial-designated lands and /or nonconforming uses. They include Ted's Bakery, SunsetBeachStore/Restaurant, Kammie's Market/Chevron Station and Sharks Cove Shell Station, Chun's Market, Paalaa Kai Center and Waialua Junction (Otake Store, Eric's Service Station, and Sagara Store).



Country Store

Country stores are freestanding and small in scale. They are usually one-story in height and are generally equivalent in size to a small neighborhood grocery store, such as those mentioned immediately above, that provides convenience goods and services to the surrounding community. Building character is typically residential in scale and generally harmonious with adjacent development and setting in form, material, finishes, and color.

3.6.1 General Policies

The general policies pertaining to each of these commercial areas are as follows:

3.6.1.1 Country Towns

- Intent is to maintain the rural "small town" character and allow for a compatible mix of commercial, service industrial and residential uses within a rural town context, as well as to recognize and maintain the unique building and streetscape character and other features of a rural town which distinguish it from more urban towns
- Emphasize commercial usage at the ground level along main (major) street frontages while allowing residential and compatible light industrial uses (in enclosed buildings) at upper levels, behind streetfront uses, or along minor or service streets.
- Preserve scenic views of agricultural fields and open spaces of surrounding areas seen from Haleiwa and Waialua Towns.
- Promote rural character by keeping buildings to one- to two-story heights, allowing building construction to the sidewalk edge, and emphasizing features which emphasize a pedestrian orientation throughout the town.
- Protect and enhance natural resources, such as wetlands and streams, within the country town areas.

3.6.1.2 Rural Community Commercial Center

- Intent is to promote a more concentrated, but small-scale commercial center on existing Commercial-zoned lands for rural communities, rather than having them dispersed along the highway.
- Limit rural commercial centers to existing zoned areas between Pupukea Road and Pahoa Road that currently serve the commercial needs of residents and visitors.
- Promote rural character by keeping buildings to one- to two-story heights, and providing appropriate landscape buffers to surrounding residential uses.

3.6.1.3 Country Store

 Intent is to provide and set criteria for considering the appropriateness of proposals for renovations or reconstruction of existing stores.

- Direct new commercial enterprises to the Country Town districts of Haleiwa and Waialua. No new country stores are planned for the region.
- Ensure that country stores are compatible with adjacent residential communities.

3.6.2 Planning Principles

The following planning principles apply to all commercial areas, including the expansion or renovation of existing commercial areas as well as to the development of new commercial facilities

- Scale and Purpose. Commercial uses should be appropriately scaled to be compatible with the region's rural character and surrounding land uses. Country Towns serve commercial and civic needs for area residents. They also provide commercial and related services for visitors to the region. Rural community commercial centers and country stores should emphasize convenient and essential services to meet the needs of the surrounding community.
- Mix of Uses in the Country Town. Permitted uses within the country towns should allow for a diverse range of civic, retail, office, and light industrial uses that meet the needs of residents and visitors. Organized around the traditional "main street," the mix of uses should be arranged and designed to provide a cohesive and compatible relationship between the uses. In general, commercial uses should be emphasized along the ground-level street frontage of main thoroughfares, with other uses located upstairs, in the rear, or on smaller service streets.
- Physical Linkages and Accessibility. Incorporate site design and facilities
 to promote pedestrian, bicycle, and transit access. Pedestrian and bicycle
 access is important for all commercial areas, while transit access is important
 for Country Towns and Rural Community Commercial Centers.
- Appropriate Scale and Architectural Style. Maintain consistency between
 the building mass of a commercial area and its rural and natural setting. The
 architectural character and scale of commercial areas should respect the
 surrounding rural and natural features, particularly when located adjacent to a
 residential area or significant natural or historic feature.
- Environmental Compatibility. Encourage energy efficiency features, such as the use of solar panels for heating water, and passive solar design, such as the use of window recesses and overhangs and orientation of openings to allow natural cross-ventilation. Also, resource conservation measures such as water constrictors and facilities for sorting of waste materials for recycling should be incorporated into the design of new developments.

3.6.3 Guidelines

The following guidelines are intended to implement the general policies and planning principles listed above.

3.6.3.1 Country Towns

Haleiwa Country Town

- Preserve the Historic Rural Town Character.
 - Maintain the low-rise (one to two stories), human-scale, historic character of the town by encouraging new development which is compatible with and complements adjacent buildings. This can be accomplished through limiting building heights, coupled with building design elements which reflect the architectural characteristics of the early 1900 period architecture identified in the Haleiwa Special District Design Guidelines and the incorporation of generous, functional, public and open spaces reflective of the town's agricultural heritage.
 - New development should complement the physical features, waterways, open space, mature trees, and sites in Haleiwa.
- Promote mixed use development which retains aspects of the ruralagricultural lifestyle that has developed in Haleiwa.
 - Commercial and related activities that are conducive to the pedestrian character of the street frontage should be encouraged along Kamehameha Highway. Other less pedestrian-dependent and conducive activities (such as manufacturing areas for products and residences, etc.) should be located behind or above commercial activities so as not to detract from the commercial retail character of Kamehameha Highway.
 - The town's growth should be focused around a mix of compatible activities such as agriculture, recreation, marine-related enterprises, farmers' markets, historic and cultural attractions, "clean" light industrial, small businesses and offices, civic and governmental services, businesses and retail activities for both residents and visitors.
 - Drainage, wastewater, and water infrastructure should be upgraded to support the growth of Haleiwa.
 - Cottage industries and small inns are also considered acceptable use options within the town center. Preservation of "Mom and Pop" type stores is also encouraged.

- New development should be located near existing built areas emphasizing redevelopment and infill along Kamehameha Highway, makai of the Haleiwa Bypass. Provide adequate landscaped buffer adjacent to the bypass.
- Provide more elderly housing in close proximity to, but not within, the existing commercial and light industrial areas of the town center.
- Promote small-scale, limited, well-regulated overnight visitor accommodations such as a small inn. Provide support facilities, such as parking lots and rest rooms, for visitors to support the commercial activities.
- Support the expansion and enhancement of Haleiwa Harbor. If possible, integrate its attractions of facilities with commercial activities in Haleiwa Town.
- Promote indoor recreational and educational facilities and programs (museums, movie theater, gym, and cultural performance theaters) and historical, cultural, and arts programs.
- Retain a distinctive pedestrian-oriented commercial area by providing a safe and pleasant pedestrian and vehicular circulation system. (Exhibit 3.6)
 - Promote a strong pedestrian-oriented commercial area by expanding "storefront" businesses along Kamehameha Highway and providing improved, expanded, and continuous pedestrian walkways linking commercial establishments within Haleiwa, including connections to a proposed farmers' market or other kinds of agricultural product and retail outlets, open space and environmental resources (such as beach parks, Haleiwa Harbor and Loko Ea Pond).
 - Enhance the attractiveness and general landscaped open space character of the area by providing roadway improvements, street trees, streetlights, street furniture, and signage compatible with the rural character of Haleiwa Town.
 - Provide a map showing attractions and services in Haleiwa.
 - Maintain Kamehameha Highway as a two-lane thoroughfare through Haleiwa Town.

Exhibit 3.6 Haleiwa Main Street



North Shore Sustainable Communities Plan

- Consolidate off-street parking to areas behind buildings, while retaining existing on-street parking wherever possible and appropriate. As needed, parking should be rearranged to accommodate the pedestrian walkway system along Kamehameha Highway.
- Provide signage and other forms of orientation to help direct motorists through the town to major facilities and to off-street parking facilities.
- Improve conditions for transit and bicycling through Haleiwa Town. This
 can be achieved by providing better designed and located bus stops,
 and a designated bike lane through the town.
- Enhance Weed Junction and Kamehameha Highway/Joseph P. Leong Junction, which are entry points to Haleiwa, in a manner which conveys their gateway functions through appropriate design, landscaping, signage and painting.
- Protect and enhance natural resources and ecosystems within Haleiwa Town (such as streams, wetlands, and fishponds) as open space elements. Retain the agricultural use adjacent to Weed Junction and the Preservation designation at Loko Ea Pond.

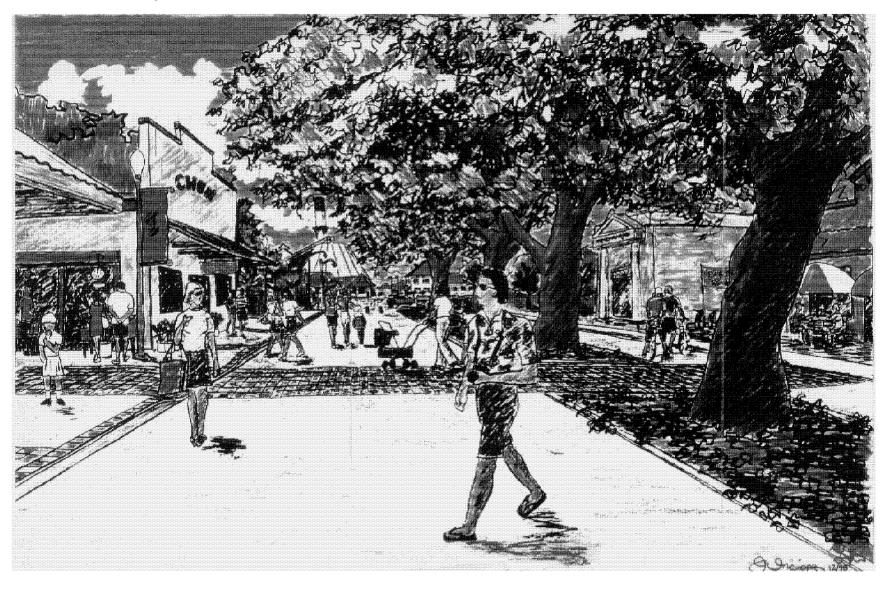
Waialua Country Town

- Preserve Small Town Character. Retain a strong sense of community with employment and commercial areas. Neighborhood parks and communityoriented recreation areas should be integrated into new residential development. Churches and public facilities should be located in or near the town. The town should continue to accommodate the needs of both residents and visitors while keeping its country character and emphasis on resident services.
- Retain Open Space and Outdoor Lifestyle. Retain large, readily accessible open spaces where outdoor recreation facilities and neighborhood gardens create open vistas and green spaces. Retain open space entrances to the town core. They include Weed Circle, Thompson Corner, and Waialua Beach Road, with Waialua Park as the entrance to the Country Town District.
- **Preserve the Plantation Town Character.** The plantation heritage is important to Waialua's identity. Significant historic features from the plantation era and earlier periods should be preserved or restored where feasible and appropriate. Although it is not the intent of this *Sustainable* Communities Plan to designate Waialua as a Special Design District, the scale and sense of Waialua as a small rural plantation town should be preserved and enhanced.

- Existing buildings of historical, cultural and/or architectural significance, such as the surviving elements of the Waialua Mill, should be preserved and maintained through rehabilitation and adaptive reuse. Where feasible, these structures should be incorporated and highlighted as a landmark and icons of the town. Not all of the Mill structures will be retained. To maintain the Mill site as an important symbolic reference for the town reflective of the plantation heritage it once served, guidelines for new construction reflecting appropriate architectural features and building mass should be formulated and used to guide and evaluate the future design of buildings for the site.
- While buildings in the commercial core may be two stories in height, onestory heights should be emphasized, in keeping with the area's historic scale and to preserve the prominence and views of existing mill structures. New commercial buildings should be similar in architectural character, scale and materials to historic structures such as the old Waialua Sugar offices and the Waialua Library.
- Design guidelines by which renovations and new construction are to be reviewed should be prepared for Waialua's commercial core to promote and develop a special image reflecting the Town's historic character and role as the cultural and business center for Waialua. The commercial area should be pedestrian oriented, bike friendly, and easily accessible from the residential neighborhoods.
- Allow Compatible Infill Development. New developments within the town
 core should emphasize commercial, civic, community, and compatible service
 uses and be developed in a style that is reflective of the town's plantation
 heritage. Infill development as well as new commercial development around
 Kealohanui Street will help to strengthen the town core and provide the critical
 mass necessary in developing a healthy town center.
 - Existing homes in the town core could remain, but new residential development should be located outside but adjacent to the town core, as generally indicated on the Land Use Map.
 - New built forms should be low-rise and compatible with Waialua's historic past and rural character.
 - Industrial uses should be located around the sugar mill.
 - Housing for resident senior citizens should be provided in close proximity to Waialua Town.

- New housing units should incorporate rural features (such as small building footprints, larger setbacks, and more landscaping) and should be sited and organized to give a strong sense of community.
- Housing programs should place high priority on the needs of existing Waialua residents.
- Promote Compatible, Community-Based Economic Development. To
 maintain the vitality of Waialua Town and provide employment opportunities for
 its residents, new economic activity is needed to replace the loss of Waialua
 Sugar Company. There is a need to promote industries that provide job or
 entrepreneurial opportunities for area residents, and training programs for new
 jobs and businesses should be made available.
 - Promote economic revitalization in the commercial core of Waialua.
 - Promote agricultural support activities at the agricultural support area adjacent to the existing mill. In addition to agricultural support activities, the mill site could also host industrial activities such as studios, car and boat repair, surfboard manufacturing and repair, warehousing, clothing and souvenir manufacturing, and wholesale activities.
 - Retain the sugar mill structures for adaptive reuse, to the extent financially feasible, as a visual symbol of Waialua's plantation town history.
 - Promote historical and cultural attractions such as museums near the mill site.
 - Attract visitors to the area by providing attractions that illustrate the history of the community or feature current agricultural operations.
 - Encourage computer-oriented, high technology business, health care, and medical services to locate in Waialua.
- Enhance the Town Core with Physical Improvements and Pedestrian Walkways and Bike Paths. (Exhibit 3.7)
 - Provide for safe and pleasant pedestrian circulation along the storefronts. As it redevelops, emphasize pedestrian circulation along Kealohanui Street. Retain a distinctive pedestrian-oriented commercial area for residents and visitors through the use of signage, street furniture, and street tree plantings to encourage walking and biking.
 - Provide a map showing services in Waialua and attractions in the region, such as Kaena Point and nearby beach parks.

Exhibit 3.7 Waialua Country Town



- Promote Kealohanui Street as a pedestrian-oriented promenade in Waialua.
- Link proposed pedestrian walkways to Waialua Town core, including linkages to a proposed farmers' market or other kinds of agricultural product and retail outlets.
- Provide convenient parking that should be landscaped and screened from roadways.
- Enhance Waialua Beach Road and Farrington Highway as gateways to Waialua Town through signage and landscaping.
- Plant street trees to enhance the pedestrian experience and to create a strong streetscape image. A detailed street tree and planting plan should be developed and implemented as part of the right-of-way plan.

3.6.3.2 Rural Community Commercial Center and Country Stores

- Rural community commercial center should be designed to provide a compact and efficient organization of various commercial services.
- Country stores should be small-scale, freestanding, compact commercial facilities. They should not be allowed to expand to larger, continuous commercial strip types of developments along arterial roads.
- Country stores should be dedicated primarily to retail uses that provide services to the surrounding community.
- Architectural scale and character should respect the surrounding natural features, and adjacent residential areas. Buildings should reflect a rural character compatible with surrounding open spaces and adjacent residential uses.
- Building heights should be limited to one story for country stores and up to two stories for rural community commercial centers.
- Encourage parking behind buildings or provide parking that is landscaped.
 Parking should be visually screened from the street and adjacent residential lots,
 by planting a landscaped screen of trees and hedges along street frontages and
 property lines and planting shade trees throughout the parking lot.
- Promote pedestrian and bicycle access.

3.6.4 Relation to Land Use Map

Commercial areas are shown conceptually on the Land Use Map in Appendix A as follows:

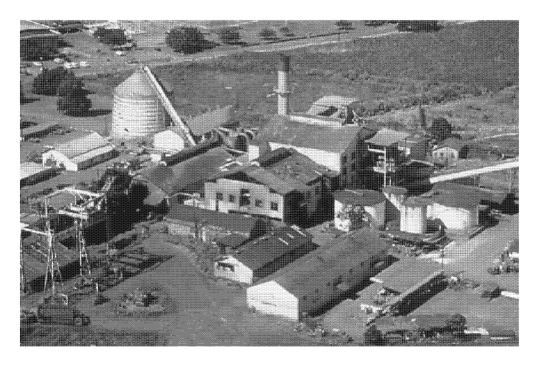
<u>Country Towns</u>. This land use designation identifies the two primary Country Town districts on the North Shore: Haleiwa and Waialua.

<u>Rural Community Commercial Center</u>. The single rural community commercial center identified on the Land Use Map is the area between Pupukea Road and Pahoa Road which consists of the Foodland store and adjacent commercial-zoned property.

<u>Country Stores</u>. This land use designation refers to existing country stores that provide commercial services to the surrounding communities. Due to their relatively small scale, their locations are not depicted on the Land Use Map.

3.7 INDUSTRIAL AREAS

The North Shore, especially Waialua Town, was built and populated primarily to service the sugar industry which was the predominant economic force in the region until recent years. While most of the land is designated Agriculture for cultivation, some lands were dedicated to related operations such as harvesting and processing, and were thus designated industrial. The industrial site at the Waialua Mill is no longer used for sugar processing and can be used for other industrial uses, including diversified agriculture-related light industrial uses. Appropriate types of light industrial uses that complement commercial-related activities can also be accommodated in Haleiwa and Waialua Country Town districts.



Waialua Mill Site

Industrial lands provide for activities such as manufacturing, sorting, processing and storage of materials and products. They provide employment opportunities for area residents as well as goods and services for consumption. Industrial uses could help revitalize the area's economy and maximize residents' choice of employment opportunities in the region.

3.7.1 General Policies

The following general policies are applicable for industrial areas:

- Encourage compatible industrial uses that help diversify and revitalize the economic base of the region. Industrial uses should be compatible with the rural character, with minimal impact on the natural environment, cultural resources, open spaces and scenic views.
- Promote industries that provide employment opportunities as well as goods and services for area residents.

3.7.2 Planning Principles and Guidelines

The following planning principles and related guidelines are applicable to industrial development.

- Maintain adequate open buffer zones between industrial activities and residential districts. Minimize impacts (views, noise and smells) and visibility of parking, storage, industrial equipment and operation areas from the street through proper site planning and landscape plantings.
- Encourage uses which have few environmental impacts and those which complement the development scale of the surrounding community in this district.
- Direct industrial activities, including boat repair, auto body and fender shops, to the Waialua Mill site.
- Allow low-impact, service industrial uses in enclosed buildings within the Haleiwa and Waialua Country Towns, so as not to detract from the pedestrianoriented commercial/retail character of roadways, such as Kamehameha Highway, Kealohanui Street, and Goodale Avenue. These could include manufacturing of clothing, arts and crafts and surfboard repair.
- Minimize visibility of large building masses or machinery elements through site planning and landscaping.

- Building height and form should reflect the contexts of their sites. At the Mill site, they should follow guidelines reflecting the Mill's image. In Haleiwa, they should follow the Haleiwa Special District guidelines. In Waialua, they should be consistent with guidelines of this document. In general, buildings should be designed to reflect the architectural character of Haleiwa or Waialua Town. Basic design principles, texture, construction materials, and colors should be compatible with the styles from this era and surrounding buildings. Where taller vertical structures are required as part of an industrial operation, they should be evaluated as to their impact on view planes to determine if they can be sited or designed to minimize visibility from scenic vistas, public roadways, residential areas, commercial areas, parks, and other significant open space areas.
- Limit industrial uses located along the shoreline to support water-dependent activities (such as boat repair and maritime-related activities). During permit application, they should be evaluated as to the uses' environmental, visual, and noise impact before being permitted.
- Promote forms of economic development and business enterprises that offer training and technical skill development to area residents. Promote "quiet" industries, such as cold storage and clothing manufacturing, computer hardware or software development, or other forms of high technology enterprises that provide job or entrepreneurial opportunities for area residents and are compatible with the rural character.
- Upgrade infrastructure to support industrial facilities.

3.7.3 Relation to Land Use Map

One industrial area is shown conceptually at the Waialua Mill site on the Land Use Map in Appendix A. Future expansion of the industrial area should be accommodated makai of the mill site. In addition to the industrial-designated lands, compatible types of light industrial uses may also be permitted within the lands designated Country Town districts at Haleiwa and Waialua if they meet the above-described policies, principles, and guidelines and those described under Section 3.6 relating to Commercial Areas.

3.8 VISITOR FACILITIES

Appropriate forms of visitor facilities should be allowed on the North Shore if they are small in scale and if they can be regulated to ensure compatibility with the rural character of the built environment and adjacent natural features. An appropriate type of visitor facility would be country inns. To support Haleiwa's and Waialua's efforts to revitalize their town cores, small-scale country inns could be allowed in Haleiwa and Waialua County Town districts on a permit basis, based on specific criteria which are outlined in the policies and guidelines below.

3.8.1 General Policies

The following general policies are applicable to visitor facilities:

- Facility design criteria for country inns should be consistent with the guidelines
 of the country town districts in which they are located, such as the Haleiwa
 Special District guidelines or the guidelines for the Waialua Country Town, as
 outlined in Section 3.6.3.1. In general, visitor facilities should observe the same
 building envelope and design standards of adjacent buildings.
- Development of visitor facilities should be oriented toward integration with the social and economic life of the surrounding communities.
- Facility development should not degrade, deplete, or preclude legitimate public access to public lands or resources.
- Development of country inns should be small in scale or be compatible in scale with the old Haleiwa Hotel (40 rooms).

3.8.2 Planning Principles and Guidelines

The following are planning principles and guidelines pertaining to country inns:

Country Inns

- Small in scale (two stories in height) and compatible with the architectural style and character of the country town districts in which they are located.
- Easily accessible to pedestrians and vehicles.
- Incorporate mixed use that cater to pedestrian activity located on the ground floor and visitor accommodations provided on the upper floor(s).
- Provide adequate off-street parking which is landscaped and screened from public roadways.
- Sited to address the streetscape and provides a setting that is conducive to pedestrian activity, when located along pedestrian-oriented streets.
- Adequately accommodated by existing and/or proposed infrastructure.
- Have limited impacts (noise, traffic, parking, visual) to the surrounding activities/properties and from public roadways.
- Do not adversely impact any historic and cultural resources.

3.8.3 Relation to Land Use Map

Visitor accommodations described above are not shown on the Land Use Map in Appendix A. As specified, country inns should be allowed only within the Haleiwa Country Town and Waialua Country Town districts, which is subject to a case-by-case review process based on policies and guidelines outlined in the preceding section and in accordance with more specific criteria and standards to be developed during the implementation of this plan.

3.9 INSTITUTIONAL USES



Haleiwa Elementary School

The purpose of designating lands for institutional uses is to provide areas for public/quasi-public institutions such as schools, airports, harbors, major health care facilities; major utility plants and substations; landfill sites, corporation yards, and maintenance yards of public agencies; religious, social, and social service institutions; and other public services.

3.9.1 General Policies

Public facilities should provide convenient public services or functionally support other governmental activities. These facilities should be planned and developed in a manner consistent with the rural character of the region and sensitive to the surrounding community land uses.

3.9.2 Planning Principles and Guidelines

The following planning principles and guidelines implement the general policies for institutional facilities listed above.

- Co-locate Neighborhood or Community Parks with elementary or intermediate schools and coordinate design of facilities when efficiencies in development and use of athletic, meeting and parking facilities can be achieved.
- Co-locate social, social service institutions, and other public service agencies to provide convenient one-stop services to the region.

3.9.3 Relation to Land Use and Public Facilities Map

Institutional areas are shown symbolically on the Land Use Map and major public facilities are identified by appropriate symbols on the Public Facilities Map, both in Appendix A. Religious, social, social service institution, and other public service uses not conceptually shown on the Land Use Map but are permitted within the commercial areas and residential communities if the uses comply with the City's Land Use Ordinance.

3.10 MILITARY

Military areas include all lands used for military and military support purposes including residential, commercial, industrial and park uses. The Helemano Reservation, with its existing and planned residential and industrial uses, and the Kawailoa Training Area and Dillingham Military Reservation are lands owned and leased by the military on the North Shore.

3.10.1 General Policies

Applicable general policies for residential, industrial, commercial, and other related uses should be applied to military lands.

3.10.2 Planning Principles and Guidelines

- The City, State, and Federal agencies should coordinate efforts with the U.S. military, especially where the Kahuku and Kawailoa Training Areas overlap with environmentally sensitive areas.
- Helemano Military Reservation has been developed to support military housing and related community facilities. The military should provide appropriate infrastructure services to support these uses and minimize any potential impacts to the region.
- Low- rise Military facilities such as for educational and recreational programs compatible with the region should be promoted for Military Reservation lands such as Dillingham Airfield.

3.10.3 Relation to Land Use Map

Helemano Military Reservation is shown conceptually on the Land Use Map in Appendix A. Military uses within the region should be compatible with the policies, principles, and guidelines included within the various land uses as conceptually shown on the Land Use Map.

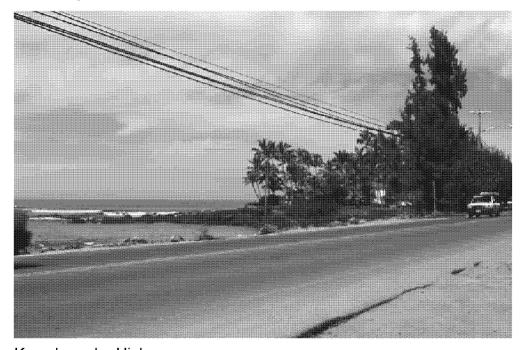
4. PUBLIC FACILITIES AND INFRASTRUCTURE POLICIES AND PRINCIPLES

The vision for the North Shore described in Chapter 2 will be implemented in part through application of the general policies and principles for public facilities and infrastructure which are presented in the following sections.

4.1 TRANSPORTATION SYSTEMS

This section describes the existing road, transit, and bikeway network on the North Shore as well as plans and proposals for future improvements, followed by general policies and planning principles to guide future transportation system development in the North Shore. These elements are shown in the Public Facilities Map in Appendix A.

4.1.1 Roadway Network



Kamehameha Highway

The only major arterial on the North Shore is Kamehameha Highway, a two-lane thoroughfare which links North Shore communities with Central Oahu and Koolau Loa. It is a scenic highway which traverses the coastline from Haleiwa through the communities of Kawailoa, Waimea, Pupukea, and Sunset Beach.

Minor arterials on the North Shore include Kaukonahua Road and Farrington Highway. Kaukonahua Road is a narrow two-lane roadway which goes from Wahiawa north to Thomson Corner and continues as Farrington Highway past Waialua and Mokuleia to Kaena Point. Numerous local streets, including Haleiwa Road, Goodale Avenue, Waialua Beach Road, and Pupukea Road, serve the rural residential communities.

Kamehameha Highway, except for the segment from Weed Junction to Haleiwa Beach Park, the Farrington Highway, and Kaukonahua Road from Thomson Corner to Weed Junction are under State jurisdiction. Except for existing cane haul roads, most of the remaining streets in the North Shore *Sustainable* Communities Plan area are under City and County of Honolulu jurisdiction.

The Oahu Regional Transportation Plan (November 1995) indicated that the morning peak-hour traffic volume in the North Shore corridor is at an acceptable level and will continue to be at an acceptable level in the year 2020. However, North Shore residents periodically experience "bottleneck" traffic congestion at Waimea, and during the winter months, Kamehameha Highway becomes congested as spectators travel slowly through the area to observe the high surf. In addition, segments of Kamehameha Highway along the North Shore are sometimes closed during periods of high surf and flooding when roads are hazardous to travelers.

Planning and development of major roadways is the shared responsibility of the State Department of Transportation (DOT) and the City Department of Transportation Services (DTS). The planning and use of federal transportation funds is coordinated through the Oahu Metropolitan Planning Organization (OMPO), a joint City-State agency.

The Oahu Regional Transportation Plan identifies two proposed City and County improvement projects to the roadway network: minor safety improvements (realignment of horizontal curves) on Kaukonahua Road, mauka of Thompson Corner, 2001 - 2005; and addition of left-turn lanes on Kamehameha Highway at Haleiwa Road and Paalaa Road, 2006 - 2020.

Other proposed projects for roadway improvements identified by the City DTS include improvements to Kamehameha Highway, Haleiwa Road, Waialua Beach Road, Kaukonahua Road, and Wilikina Drive.

4.1.2 Transit (Bus Service) System

Fixed route bus service is provided through the City DTS, which currently contracts with Oahu Transit Services (OTS) for operation of The Bus. The OTS also operates the Handi-Van system, which is a demand responsive paratransit service for semiambulatory and nonambulatory persons with disabilities. According to the *Oahu Regional Transportation Plan*, TheBus system provides 79 numbered bus routes with a fleet of 525 buses.

The North Shore is serviced by four bus routes (see Table 4-1).

Table 4-1		
Bus Routes Servicing	North	Shore

Route Number	General Service Area Within North Shore					
52	Wahiawa Circle Island Ala Moana Center to Wahiawa, Turtle Bay, Kaneohe, and back to Ala Moana Center					
55	Kaneohe Circle Island Ala Moana Center to Kaneohe, Turtle Bay, Wahiawa, and back to Ala Moana Center					
76	Waialua/Haleiwa Kamehameha Highway/Achiu Lane to/from Aweoweo/Waialua Beach Road					
88A	North Shore Express Aiea or Wahiawa to Turtle Bay and Ala Moana during morning, Ala Moana to Kahaluu, Turtle Bay, and Aiea in the afternoon					

In addition to the DTS service, there is a state-operated school bus system that provides both fixed route and curb service transportation for students of Haleiwa Elementary, Waialua Elementary, Sunset Beach Elementary, and Waialua Intermediate and High Schools.

There are no plans to extend or expand the number of bus routes on the North Shore, but the frequency and capacity will be increased by additions to the islandwide bus fleet. The 1994 Comprehensive Bus Facility and Equipment Requirements Study examined bus system expansion and financing needs for the period 1994-2006. Assuming future expansion of the islandwide bus fleet to 650 buses, the study showed an increase in buses assigned to the Central Oahu/North Shore Service Area from 45 to 60, of which eight are expected to be articulated (high capacity) buses.

4.1.3 Bikeway System

Oahu has 55.4 miles of existing bikeways. *Bike Plan Hawaii* (1994), a State master plan for bikeways, proposes another 293.1 miles islandwide. The timetable for development will depend upon construction feasibility (including right-of-way acquisition) and funding. *Bike Plan Hawaii* defines the various types of bikeways, as follows.

- **Bicycle Route.** Any street or highway so designated, for the shared use of bicycles and motor vehicles and/or pedestrians. Bike routes are of two types: a widened curb lane in a urban-type area or a paved right shoulder in a rural-type area.
- **Bicycle Lane.** A portion of a roadway designated by striping, signing, and pavement markings for the preferential or exclusive use of bicycles. Only crossflows by motor vehicles or pedestrians to gain access to driveways or parking facilities or bus stops are allowed.

• **Bicycle Path.** A completely separated right-of-way normally designated for the exclusive use or semiexclusive use of bicycles. Where such a facility is adjacent to the roadway, it is separated from the roadway by a significant amount of open space and/or a major physical barrier (such as trees or a considerable change in ground elevation).

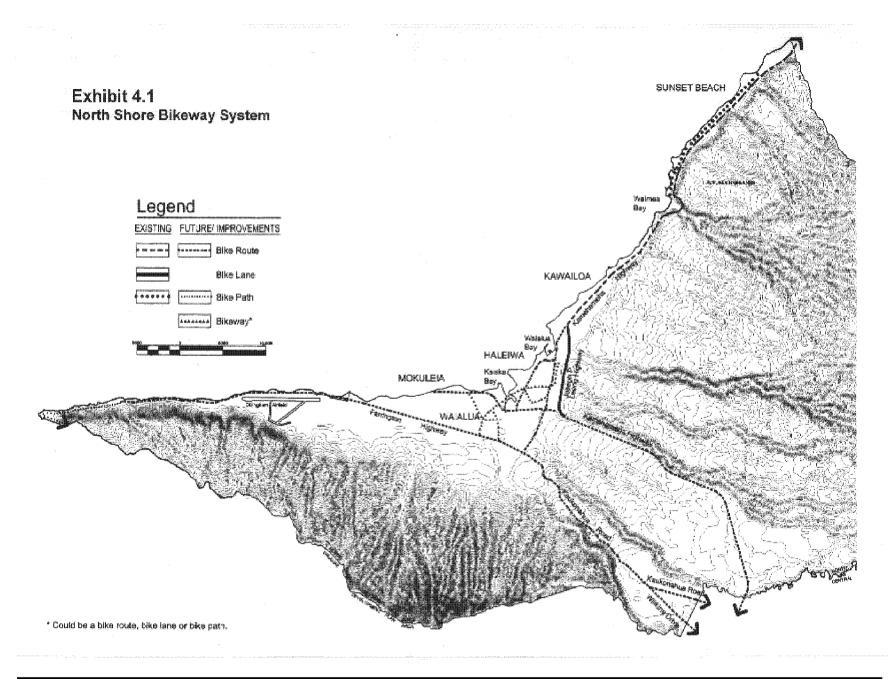


Ke Ala Pupukea Bike Path

The State's bikeway master plan indicates a North Shore bikeway system that includes the Ke Ala Pupukea Bike Path; a coastline route with links to Central Oahu, the Koolauloa District, and around Kaena Point to Waianae; a route through Haleiwa Town; a leg along the Joseph P. Leong Highway (Haleiwa Bypass); and along Haleiwa and Waialua Roads. Additional potential bikeways, including one along Paalaa Road in Haleiwa, and three in Waialua (Puuiki Street, Cane Haul Road (Extension), and Kealohanui Street, respectively) are also included in this *Sustainable* Communities Plan. Existing and proposed bikeways are shown on Exhibit 4.1: North Shore Bikeway System.

4.1.4 Other Transportation Facilities

Airports. Dillingham Airfield in Mokuleia is the only public airport facility located on the North Shore *Sustainable* Communities Plan area. The U.S. Army owns the field, but it is used jointly by the U.S. Army and the State of Hawaii. The airfield consists of a 9,000-foot- long runway, 25 hangars and 35 tie-downs for smaller aircraft, facilities for air-taxi services, and a storage building.



The airport services general aviation demands for small aircraft including civilian-powered flights, sailplane/glider flights, and parachute activities, as well as, military flights. The location of Dillingham Airfield, near the slopes of the Waianae Mountains and the seashore, however, limits the number and size of aircraft that can be accommodated. As a result, the existing airfield can satisfy only a portion of general aviation demands for Oahu. The State Department of Transportation has indicated that no major expansion is planned for Dillingham Airfield, except for improvements to existing facilities and construction of additional hangars. General aviation demands will instead be met by the existing airport facilities at Barbers Point Naval Air Station (BPNAS), which is designated a major general aviation facility in the 1996 Barbers Point Redevelopment Final Recommended Plan.

Harbors. The Haleiwa Boat Harbor is the only State-owned and operated recreational boat harbor facility in the North Shore region. The facility is managed by the Department of Land and Natural Resources. See Chapter 3, Parks and Recreation, for more information.



Haleiwa Harbor

4.1.5 General Policies

The following are general policies for transportation systems on the North Shore.

- Retain Kamehameha Highway as a two-lane thoroughfare, to maintain the North Shore's rural character. Provide roadway improvements to promote pedestrian safety and traffic efficiency.
- Provide adequate access between residences, jobs, shopping, and recreation areas on the North Shore. Improve access to adjacent areas, especially to Central Oahu.

- Provide more opportunities and support facilities for convenient and safe pedestrian and bicycle travel. Bikeway development should be coordinated with private landowners to ensure that safety, liability, and a mixture of use issues can be adequately addressed.
- Approve new residential and commercial development in the North Shore only
 if the State Department of Transportation and the City Department of
 Transportation Services certify that adequate transportation access and
 services can be provided.
- Include considerations of the visitor population in determining allocations of resources and facilities for the North Shore
- Promote ride-sharing activities such as car/van pooling. Reduce the commute to work with options such as teleworking.

4.1.6 Planning Principles and Guidelines

The following planning principles and guidelines relate to transportation systems for the North Shore.

- Establish rural streetscape design and development standards within residential areas consistent with the rural character of the region. These could include narrower streets, more landscaping, and grassed swales in place of sidewalks with curbs and gutters.
- Emphasize accessibility from residential streets to bus routes, parks, schools and commercial centers. Design roadways to facilitate bicycle and pedestrian travel.
- Provide scenic look-out points to minimize hazards created by slower sightseeing traffic and to enhance the appreciation of the region's scenic resources.
- Provide appropriately sited and designed off-street parking areas at popular beach parks wherever feasible, including parking in support parks mauka of the highway.
- Study the safety and feasibility of developing passing zones on Kamehameha Highway and Kaukonahua Road from Haleiwa/Waialua to Wahiawa to reduce traffic delays due to slower moving vehicles.
- Improve Kaukonahua Road and Kamehameha Highway from the Joseph P. Leong Highway (Haleiwa Bypass Road) to Wahiawa and beyond. Promote the development of emergency runaway vehicle ramps on Kamehameha Highway and Kaukonahua Road, from Wahiawa to Haleiwa/Waialua.

- Protect the natural resources of Kaena Point from potentially damaging vehicular traffic and roadway development.
- Provide pedestrian-friendly walkways, off-street parking, bus pull-outs, tour bus maneuvering areas, and drainage improvements in Haleiwa.
- Improve the main roadways within Haleiwa and Waialua Country Towns with shade trees, landscaping, sidewalks, street furniture, and signage to promote pedestrian orientation within these country towns.
- Provide better locations and designs for bus stops.
- Explore the possibility of a Historic Haleiwa Trolley.
- Encourage the State to upgrade, maintain, and expand the boating facilities at Haleiwa Harbor to meet the needs of recreational and commercial fishing and leisure boating activities.
- Provide adequate shoreside facilities at Haleiwa Harbor to support the recreational and commercial use of the harbor.
- Maintain small aircraft, general aviation and other recreational, commercial, or other military uses at Dillingham Airfield in cooperation with the U.S. Army. As necessary, upgrade and maintain facilities to support airfield use.
- Proposed uses in the vicinity of Dillingham Airfield should be compatible with aircraft noise levels and overflights from the airfield.
- Where feasible, explore the possibility of developing existing cane haul roads to serve as tsunami evacuation routes to mauka lands and alternate routes when roads become impassable due to flooding or other incidents.

4.2 WATER SYSTEMS

Several intermittent and perennial streams in the North Shore area provide wildlife habitats and scenic, recreational, and cultural resources. Sedimentation as well as chemical and biological contaminants affect stream water (surface water) quality. Chemical and biological contaminants, as well as untreated sewage from leaking cesspools, also affect groundwater quality. The polluted surface and groundwater eventually reach the ocean and affect nearshore water quality. The quality of the North Shore's ground, surface, and nearshore waters is vital for ensuring public health, providing outdoor recreation, sustaining the integrity of ecological systems, and maintaining general environmental quality.

In 1987, the State enacted the Water Code (HRS Chapter 174C) in order to protect, control, and regulate the use of the State's water resources. This Code is implemented through the

Hawaii Water Plan which addresses water conservation and supply issues on a statewide level by incorporating county water plans and water-related project plans.

The Oahu Water Management Plan (OWMP), signed into law in 1990, is the City and County of Honolulu's component of the Hawaii Water Plan. The OWMP sets forth strategies to guide the State Commission on Water Resource Management (CWRM) in planning and managing Oahu's water resources. These strategies conform to the General Plan regional growth policy for the City and County of Honolulu.

Based on CWRM's 1996 basal permitted uses on Oahu for about 340 million gallons per day (mgd), there are approximately 75 mgd¹ of untapped sustainable yield remaining in the islandwide groundwater supply that could be developed.

The Board of Water Supply (BWS) operates and maintains separate domestic water systems for various regions in the City and County of Honolulu. One of its major goals is to see that the development of additional water sources is compatible with growth in consumer demand throughout Oahu. The key to achieving this goal is the development of long-term water demand estimates and commensurate planning of future water system facilities to meet projected demands. Water demand projections are based on the City's population distribution projections for the *Sustainable* Communities Plan areas.

On the North Shore, municipal water is primarily supplied by the BWS. Water demand in the North Shore area for 1996 was approximately 2.7 mgd. It is projected that demands for the area will increase to about 3.0 mgd by the year 2000 and 3.7 mgd by 2020. The demand projections are based on the City and County population estimates for the year 2020. The water supply from existing and proposed wells on the North Shore is more than adequate to meet current and future demand in the region.

A proposed 16-inch main along Kamehameha Highway from Pupukea to Sunset Beach and the proposed Mokuleia and Kawaihapai Well are projects currently included in the BWS's sixyear capital improvement program (CIP) for FY1998 to FY2003. The CIP also includes plans to improve the water quality of the Haleiwa and Waialua systems with the installation of granulated activated carbon contact tanks to remove trace amounts of pesticides from the water.

The BWS has a long-range plan to develop new water sources to meet islandwide demand. This would utilize any surplus available sustainable yield resulting from the transition of Waialua Sugar. Surplus sustainable yield is also available to support diversified agriculture and municipal uses in the region. In the development of water resources, it is important that the needs of the North Shore be met first, and that the transmission of water out of the North Shore will not be detrimental to the North Shore. For example, wetland farming of lotus root and taro requires a continuous clean fresh water supply. Hence, the availability of North Shore water for the islandwide water supply needs will first account for all in-district agricultural and municipal needs, while balancing the environmental value of the area's stream systems.

Accounts for interim instream flow standards.

Beyond the development of water systems to meet current demand, however, is the need to conserve water resources for future demand. Water management strategies identified in the OWMP include water conservation, groundwater development, surface water development, desalination, and effluent water reuse.

The BWS is undertaking an integrated water resource planning process, utilizing community involvement, to provide the next update of the OWMP. In addition to municipal water demand, the update should include projected demand for agricultural, military, and other nonmunicipal uses that utilize private sources.

4.2.1 General Policies

The following general policies seek to maintain an adequate supply of good quality water, retain sufficient acreage in watersheds to insure infiltration into groundwater aquifers, and strengthen the protection of watersheds.

- Protect and preserve the streams, wetlands' natural drainage systems, watershed areas and the shoreline and coastal areas. The high quality of the region's nearshore and coastal waters should be maintained to benefit recreation, the economy, and the region's natural biological systems. Buffer zones around streams and wetlands should be provided to protect the ecological integrity of these features.
- Protect and manage the water resources that support wetland farming (taro and lotus root) to ensure sufficient quantity and quality.
- Retain existing acreage in the State Conservation or the City Preservation
 Districts to protect watersheds. In addition, important watershed areas which
 are in designated but unused State Agricultural or Urban Districts should be
 reclassified to the State Conservation or City Preservation Districts.
- Integrate management of all potable and nonpotable water sources, including groundwater, surface water, storm water, and reclaimed water following City development of plans and adoption of appropriate management processes in accordance with City and State mandates.
- Where feasible and appropriate, encourage the use of nonpotable water for irrigation of landscaping and agricultural lands to conserve the supply of potable water. Consider the use of dual water lines to allow conservation of potable water and use of nonpotable water for irrigation and other appropriate uses, where practical.

4.2.2 Planning Principles and Guidelines

• **Development and Allocation of Potable Water.** While the State Commission on Water Resource Management has final authority in all matters

regarding administration of the State Water Code, the Board of Water Supply should coordinate development of potable water sources and allocation of all potable water intended for urban use on Oahu. The Board of Water Supply should certify that adequate potable and nonpotable water is available before a new residential or commercial development is approved. State and private well development projects should be integrated into and made consistent with City water source development plans.

- Water Conservation Measures. Conserve the use of potable water by implementing the following measures, as feasible and appropriate:
 - Low-flush toilets, flow constrictors, and other water conserving devices in commercial and residential developments.
 - Indigenous, drought-tolerant plant material and drip irrigation systems in landscaped areas.
 - Use of reclaimed water for the irrigation of parks, golf courses and other landscaped areas where this would not adversely affect potable groundwater supply.

4.3 WASTEWATER TREATMENT

The majority of the homes in the North Shore area are served by individual cesspools and septic tanks. The Paalaa Kai Wastewater Treatment Plant (WWTP), a municipal facility in Waialua, serves 314 homes in the Paalaa-Kai subdivision. Effluent from the facility is discharged into injection wells. There are also 21 private treatment plants serving various apartment complexes with effluent disposal into injection wells. Privately operated injection wells are a convenient, long-term disposal alternative to the lack of a municipal sewage collection and disposal system. However, the nature of injection wells and the common lack of land space for replacement injection wells make them a costly and often unreliable method of discharge.

The Final Environmental Impact Statement for Supplemental Waialua-Haleiwa Wastewater Facility Plan of June 1996 states that:

- Approximately 40 percent of the cesspools in the Waialua-Haleiwa area have failed and require pumping on a frequent basis.
- Even when working properly, cesspools remove only a small percentage of the pollutants contained in domestic sewage, with groundwater carrying the remainder into the ocean.
- There is a resulting potential for health problems as a result of the heavy recreational use of shoreline waters in this area.

The plan recommends that a centralized subregional wastewater treatment system (collection and conveyance system, treatment plant, and effluent disposal by means of irrigation and rapid infiltration) be constructed to serve Waialua, Haleiwa and a portion of Kawailoa. The proposed system consists of two 0.7 mgd capacity WWTPs, one southwest of Waialua and the other east of Haleiwa, each requiring approximately 35 acres. The appropriate locations of the WWTPs are shown on the Public Facility Map in Appendix A.

While there are currently no funds to implement a centralized system, the City will continue to work with the community to develop, implement, or facilitate appropriate, effective, and environmentally sound wastewater treatment systems that will not impact groundwater and ocean resources. The City will be exploring various alternatives for providing small regional wastewater treatment solutions in areas such as Haleiwa and Waialua.

The Pupukea-Sunset Beach area is not currently part of the City's Waialua-Haleiwa Sewerage District, but should be included in future wastewater treatment plans in order to protect the critical ocean environment in the area. Over the last few years, the State Department of Health (DOH) has been slowly upgrading the individual cesspools to individual wastewater treatment systems in an effort to eventually eliminate all cesspools. All wastewater plans must conform to applicable provisions of the DOH's Administrative Rules, Chapter 11-62, "Wastewater Systems".

4.3.1 General Policies

The following general policies apply to wastewater treatment systems on the North Shore.

- Providing adequate public or private wastewater treatment facilities and improving the existing wastewater management services on the North Shore is the highest priority. Identify appropriate areas and technologies to provide effective sewage treatment. However, the scale of these improvements should be proportionate to the desired growth pattern.
- New wastewater treatment systems should meet standards that minimize adverse impacts on potable water sources and the ocean. An ocean outfall in the North Shore area has been rejected by the community as an option due to environmental and economic considerations. New developments should provide for environmentally sensitive wastewater collection and disposal.

4.3.2 Planning Principles and Guidelines

• Beneficial Use of Reclaimed Water. Use reclaimed water for irrigation and other uses, where feasible, in accordance with the requirements of the Guidelines for the Treatment and Use of Reclaimed Water (November 22, 1993) by the State Department of Health and the No Pass Line established by the Board of Water Supply. A "wetlands" treatment system could serve as wild bird refuges that could also be used as a picnicking area and/or children's fishing park.

- Replacement of Cesspools. Replace outdated individual cesspools with septic tanks and individual wastewater systems. Consider public programs or policies to support private conversion efforts.
- Adjacent Uses. Discourage new residential, commercial or school uses in close proximity to wastewater treatment plants where odors will be prevalent.

4.4 ELECTRICAL POWER DEVELOPMENT

The North Shore is served by Hawaiian Electric Company (HECO) facilities, which include subtransmission and distribution lines, as well as distribution substations. Power is generated outside of the North Shore area through HECO power plants and NonUtility Generators (independent power producers). Electrical power is then transported via transmission lines and subtransmission lines to the Waialua, Waimea, and Kuilima sub-stations. From these three substations, power is distributed to the North Shore community through a system of distribution lines.

To provide better reliability of electrical service, mitigate existing low-voltage conditions; and to meet the increasing future demands of the region, HECO is planning to upgrade and construct additional facilities, including a proposed 46 kilovolt subtransmission line mauka of Kamehameha Highway, connecting the Waialua Substation to the Kuilima Substation.

Communications for HECO have become an increasingly important and integral part of the island's energy delivery system. Fiber optics, mobile radio, microwave radio, packet radio, and multiple address system (MAS) UHF radio links all improve operations, control, and service of HECO's electrical system. As the energy system grows and as future applications materialize in the areas of metering and customer communication, supervisory control and data acquisition, and mobile communications, the need to control, service, and monitor HECO's facilities becomes greater. HECO has immediate plans to improve the mobile radio coverage with the upgrade of the existing Mokuleia communications site. HECO's long-range plan is to further improve mobile radio communications, with the adaption of mobile data, and completion of a microwave radio communications loop system around the island of Oahu.

4.4.1 General Policies

Additions to utility systems and other public facilities should be located in areas
where they will least obstruct important views. Locate and design system
elements such as renewable electrical power facilities, substations,
communication sites, and transmission lines to avoid or mitigate any potential
adverse impacts on scenic and natural resources. Locating powerlines
underground or away from Kamehameha Highway is desired.

4.4.2 Planning Principles and Guidelines

• Facility Routing and Siting Analysis. If any new or relocated electrical power facilities, substations, communications sites, or transmission lines are necessary, the selection of the route or site of such facilities should avoid or mitigate any potential adverse impacts on scenic and natural resources. Although these facilities are not shown on the Public Facilities Map, their routes and sites are reviewed by administrative agencies of the City.

4.5 SOLID WASTE HANDLING AND DISPOSAL

Littering and illegal dumping on agricultural lands and vacant lots is a chronic problem in parts of the North Shore region. There is a shortage of regular maintenance crews to pick up all the trash left on beaches, parks, and highways.

Solid waste collection and disposal systems on the North Shore consist of a City and County-operated solid waste transfer facility at Kawailoa. Household refuse collection services are provided by the City and County and private haulers. Municipal wastes are primarily processed at the H-POWER facility or recycled. The Kawailoa Transfer Station, located on Kawailoa Drive in Haleiwa, is an intermediate disposal site which accepts trash from City collection vehicles, some private haulers, and small businesses. It also serves as a convenience center for taking in and separating refuse delivered by householders.

Refuse generated by nonhouseholds is collected by private haulers and delivered to the H-POWER facility. There is only one active landfill (Waimanalo Gulch) in the Ewa area which accepts primarily noncombustible wastes. The Waimanalo Gulch landfill has a remaining site life of less than five years under existing load levels. The City has instituted recycling and other waste diversion programs in an effort to expand the useful life of this landfill. The Dole Food Company maintains one solid waste dump for agricultural waste, such as mud, rocks, and leafy trash. This dump is not available to the public.

The Integrated Solid Waste Management Act mandates the counties to develop a "master plan" for solid waste management that consists of a wide array of management options including source reduction, recycling, bioconversion/composting, incineration and landfilling. The City's Solid Waste Management Plan outlines a comprehensive, unified approach to such vital issues as landfill and disposal facility siting, expansion of existing services and facilities, specialized waste disposal (e.g., batteries, tires, sewage sludge, medical and hazardous wastes), waste reduction, and recycling strategies. There are no plans to create additional convenience center, transfer station, or landfill operations on the North Shore.

4.5.1 General Policies

The following general policy applies to solid waste handling and disposal in the North Shore:

- As waste management and technological innovations occur, the North Shore
 can and should play a part in the City's long-term efforts to establish more
 efficient waste diversion and collection systems. However, since the region is
 not expected to contribute significantly to future increases in Oahu's solid waste
 management demands and does not contain sites suitable for the processing
 or disposal of solid waste on an islandwide scale, it would be inappropriate to
 consider any future landfills on the North Shore.
- Provide adequate resources for trash removal, cleanup of illegal dumps, and enforcement of antidumping laws.

4.5.2 Planning Principles and Guidelines

- Recycling Programs and Facilities. Promote the recycling of waste materials by providing expanded collection facilities and services, and public outreach and education programs. Encourage recycling of regional green waste by establishing green waste facilities in an appropriate location, possibly integrated with, or adjacent to the Refuse Transfer Station in Kawailoa, on the North Shore.
- Efficient Solid Waste Collection. Expand the use of automated refuse collection in residential areas

4.6 DRAINAGE SYSTEMS

Flooding is a recurring natural hazard facing the region. Flood hazard conditions occur from storm runoff; channel overflows passing through lands stripped of vegetation or pavements and other impervious materials; inadequate drainage facilities due to changing drainage patterns from agricultural or urban development; clogging of natural drainage channels or streams; undefined stream flow patterns; and isolated topographic depressions.

The Federal Flood Insurance Rate Maps (FIRMS) and the City's Plate 6 maps identify many areas of the North Shore which are prone to flooding. All coastal areas in the North Shore area are prone to flooding because of high surf, tsunami activity, and heavy mauka stream flows. These areas are generally makai of Farrington Highway and Kamehameha Highway. However, areas around large streams and gulches are also prone to flooding.

In general, existing storm water systems do not meet current City drainage standards.

4.6.1 General Policies

- Improve the drainage system in the region to provide adequate protection from flooding. Encourage coordination between public agencies and private landowners on needed drainage improvements and develop a phased plan for improvements.
- Use nonstructural measures to mitigate storm runoff and flooding. In general:
 - Maintain conservation and agricultural land uses;
 - Establish and maintain appropriate vegetative cover on sediment and debris-producing areas;
 - Implement land use zoning to restrict future development within identified floodway, flood fringe, coastal high hazard, and general flood plain districts; and
 - Require new development to give consideration to natural features such as streams, flood and erosion hazards, and water discharge areas.
- Use of structural measures to reduce flood hazard potential might include:
 - Relocating or flood-proofing buildings which are flood prone;
 - Improving road culverts and bridges;
 - Requiring all structural or land improvements to provide adequate drainage and flood mitigation measures to reduce storm runoff;
 - Requiring utilities and sewage disposal systems to be designed, located, and constructed to minimize flooding damage or water contamination; and
 - Requiring all development in areas subject to floods and tsunamis to be located and constructed in a manner that will not create health or safety hazards.

4.6.2 Planning Principles and Guidelines

Planning principles and guidelines to guide the improvement and management of North Shore drainage systems include:

• Retention and Detention. Public and private agencies should employ methods of retaining or detaining storm water for gradual release as the preferred strategy for management of storm water. Where feasible, any open

space, including parking lots, landscaped areas, mini and community parks, and public and private golf courses should be used to detain or allow ground infiltration of storm water flows to reduce their volume, their runoff rates, and the amounts of sediment and pollutants transported.

- Relation to the Regional Open Space Network. To the extent possible, integrate planned improvements to the drainage system into regional open space networks by emphasizing the use of detention/retention basins, creating passive recreational areas, and creating recreational access for pedestrians and bicyclists.
- Gulches as Natural Drainageways. Natural gulches should be retained as
 flood plains and open space resources. Further development of residential,
 commercial or industrial uses within gulches should be avoided, and grading
 or other disturbance of gulch walls should not be allowed.
- **Drainage System Improvements.** Drainage system design should emphasize control and minimization of nonpoint source pollution. Where hardening of stream channels is unavoidable, improvements should protect habitat, maintain rural character and aesthetic quality, and avoid degradation of coastline and of stream and nearshore water quality, consistent with guidelines stated in Section 3.1.3.4.
- Floodplain Management. Drainageways should be designed to control 100-year floods. Any future work performed within the 100-year floodplain will have to adhere to the requirements of the Federal Emergency Management Agency (FEMA) and meet all flood-proofing requirements.
- Adequate Maintenance. Drainageways and flood mitigation structures should be regularly maintained and cleaned of debris to ensure that they achieve the purpose for which they were designed.
- **Maintain Quality of Waialua Bay.** Waialua Bay, which is classified as AA waters by the State Department of Health, should be protected in its natural pristine state as much as possible.

4.7 SCHOOL FACILITIES

Primary (K-6) and secondary (7-12) educational opportunities on the North Shore are provided by the Department of Education (DOE) and individual private schools. At present, there are four public schools in the North Shore *Sustainable* Communities Plan area: three primary (K-6) schools and one combined intermediate (7-8) and high (9-12) school. Private schools in the region include St. Michael's School (Preschool-8), Sunset Beach Christian School (K-8), and the proposed Aloha Ke Akua High School. The current enrollment and design enrollment (the number of pupils these schools are designed to accommodate) for these schools are shown in Table 4-2.

Table 4-2
Student Enrollment and Design Enrollment

School	Grade	1997 Enroll	1998 Capacity	Design Enrollment
Haleiwa Elementary	K-6	412	605	600
Sunset Beach Elementary	K-6	297	511	520
Sunset Beach Christian School	K-8	109		140
St Michael's School	Pre-8	215		280
Waialua Elementary	K-6	564	625	600
Waialua High and Intermediate	9-12	951	1200	1200

DOE enrollment projections for individual schools reflect current migration patterns within the school service area. Adjustments are made in the school service area for new housing developments, birth statistics, changes in service boundaries, changes in school organization, and attendance of students from outside the school service area by district exception. Enrollment projections are utilized for facilities and program planning.

Waialua Elementary is operating near capacity while other schools have more space to accommodate additional students from the school's service boundary. Future residential developments in the area will have an impact on the area schools. However, the DOE currently does not project any new schools for the North Shore Sustainable Communities Plan area. Temporary classrooms may be used to handle future enrollment increases at the various schools.

Future projects pending legislative funding include expansion of the administration building for Waialua Elementary School and an administration building for Sunset Beach Elementary School.

The span of time between identification of the need for a new school and the actual opening and operation of that school's first increment requires a minimum of five years with additional time required for a high school. A series of steps are involved, including securing funds from the legislature; assessing, selecting and acquiring the site; conducting an environmental impact statement; developing a master plan; and designing and constructing the new school. Decisions to build new schools are based on demonstrated need, as reflected in actual and projected enrollment counts. This process, which is generally reactive, is aggravated by the five-year development timetable. By the time a new facility is established, the problems at existing facilities are acute, necessitating the need for interim solutions.

For a new school site, the DOE will require 12 usable acres for an elementary school, 18 usable acres for an intermediate school, and 50 usable acres for a high school.

The cost of school construction and operation is high. Currently, the estimated construction costs for an elementary school is in the range of \$20 to \$25 million. Construction of an intermediate school is approximately \$40 to \$45 million, and for a high school, \$70 to \$75 million. When land is not provided by the developer or the State, land acquisition costs may add several hundreds of thousands of dollars to the cost. Operational costs for staffing are also high. Over a three-year period, the operational costs for a typical elementary school may equal its developmental costs.

4.7.1 General Policies

General policies for school facilities are as follows:

- Approve new residential developments only after the State Department of Education certifies that adequate school facilities, either at existing schools or at new school sites, will be available when the development is completed.
- Have developers pay their fair share contribution towards school development to ensure provision of adequate school facilities for the children living in their development.

4.7.2 Planning Principles and Guidelines

The following principles should be followed in planning and operating schools in the North Shore:

- Schools As Community Centers. Because of the difficult financial problems
 for all sectors, new communities are likely to have fewer churches, private social
 halls, and recreation facilities. As a result, schools may have to assume
 important functions as cultural and recreational centers and as meeting
 facilities. The State DOE should design school facilities to facilitate community
 use during nonschool hours and weekends.
- Co-location With Parks. Elementary and intermediate schools should be colocated with neighborhood or community parks, and designs of facilities should be coordinated by the State DOE and the Department of Parks and Recreation whenever possible to avoid duplication of parking and of athletic, recreation, and meeting facilities.
- Shared Facilities. The Department of Parks and Recreation should coordinate the development and use of athletic facilities such as swimming pools, gymnasiums, and playfields and courts with the DOE where such facilities would maximize use and reduce duplication of function without compromising the schools' athletic programs. Moreover, the DOE should coordinate the structural design of school buildings with the Civil Defense Agency so that these facilities may be used as public hurricane shelters.

 Fair Share Contribution. The City supports the State Department of Education's request for fair share contributions from developers of residential projects to ensure that adequate school facilities are in place at existing and new schools to meet the needs of residents.

4.8 PUBLIC SAFETY FACILITIES

4.8.1 Police Protection

The North Shore *Sustainable* Communities Plan area is considered part of the Honolulu Police Department's (HPD) District 2. District 2, which includes Wahiawa, is divided into 12 patrol beats. Beats are defined areas patrolled by one or more officers during the course of a work shift with definitions based on geographic area, type of population, and calls for police service. Approximately 5 or 6 officers are needed to staff one beat on a 24-hour basis. Currently, there are four police beats covering the North Shore *Sustainable* Communities Plan area. The HPD has estimated that an additional two beats will be needed to serve the North Shore *Sustainable* Communities Plan area over the next 20 years.

According to HPD, there is no connection between the level of police service in an area and the existence of police stations or substations in an area. Officers respond to scenes from the road, not from the station. Thus, staffing, not facilities, determines police service. HPD has stated that "it is far more important to put officers on the road where they can protect our communities than to spend money acquiring, maintaining, and staffing unneeded facilities." However, HPD would not object to office space being allotted as a base for the beat officers, as long as there is no requirement for any "round the clock" staffing, as it is costly to construct such a facility and maintain and staff such a facility for 24 hours, 7 days a week.

Police service for the Helemano Communications Unit is provided by federal authority, and has little effect on HPD operations.

4.8.2 Fire Protection

The Honolulu Fire Department (HFD) operates fire stations at Sunset Beach and Waialua-Haleiwa. Fire protection service provided from the Sunset Beach and the Waialua Fire Stations is adequate. The Fire Department's 20- to 25-year Capital Improvement Program does not include any projects for the North Shore area. If communities expand or existing areas are built upon, new facilities may be needed. Land acquisition for any future stations will be dependent upon development timetables.

Letter from Michael S. Nakamura, Chief of Police, Honolulu Police Department, to Cheryl Soon, Chief Planning Officer, Planning Department dated October 17, 1996.

4.8.3 Ocean Safety

The Emergency Services Department, Ocean Safety Division, provides lifeguard service for the following lifeguard towers on the North Shore: Sunset Beach, Ehukai, Ke Waena, Waimea Bay, and Haleiwa Alii Beach. There are approximately 30 water safety officers assigned to the North Shore. They conduct daily patrols from rescue crafts and also patrol from Waimea Bay to Sunset Beach on all-terrain vehicles. The number of water safety officers within the district will fluctuate seasonally, with more officers assigned to the area during the high surf season in the winter and less during the summer months. It is noted by Ocean Safety officials that rescue craft patrols will play a larger role in extending lifeguard services in response to new or expanded beach parks in the region.

4.8.4 Civil Defense

The Civil Defense system for the City and County of Honolulu is the responsibility of the Oahu Civil Defense Agency (OCDA). The OCDA is responsible for monitoring, warning, evacuating and securing (if necessary) the vulnerable areas of the entire North Shore.

The Civil Defense Warning Siren system for the North Shore Sustainable Communities Plan area has, with the exception of two locations (Haleiwa and Waialua Sugar Mill), been completely upgraded within the last two years. Upgrading of the remaining two sites will be completed when funds become available.

The North Shore is susceptible to natural hazards such as tsunami, tropical storms, and hurricanes. In the event of these hazardous conditions, residents need to evacuate to shelter facilities. There are two public shelter facilities for the North Shore *Sustainable* Communities Plan area -- Waialua High and Intermediate School and Sunset Beach Elementary School.

Flooding is the most common and recurring hazard. Under heavy, continuous rain and flooding conditions, OCDA plans are in place to evacuate large portions of Haleiwa and Waialua, if required, and include additional evacuation options in the event Wilson Dam were to fail.

According to OCDA, planning for the area must include preparedness education and the provision of adequate warning devices, adequate transportation routes for evacuee movement, and suitable shelters where evacuees can seek refuge. The OCDA recommends that any new public buildings such as schools and recreation centers be required to consider emergency shelter capabilities as a secondary use of the building.

4.8.5 General Policies

General policies for all public safety facilities are as follows:

• Promote an integrated approach to public safety on the North Shore, which will enable police, fire, ocean safety, civil defense, and emergency medical efforts to share resources and information, as appropriate.

- Consider visitor populations in allocating public safety resources.
- Provide adequate staffing facilities to ensure effective and efficient delivery of basic government service and protection of public safety. These could include police and fire protection as well as ocean safety and civil defense alert/warning systems; public education programs to serve the increased population projected for the area; implementation of a Beach Hazard Ratings Studyfor cost-effective allocation of lifeguard resources; public shelter facilities; and improved transportation networks which can service evacuee movement.
- Approve new development only if staffing and facilities will be adequate to provide police and fire protection when development is completed.
- Increase police presence, including car and bicycle patrols and community policing efforts, especially in high-theft areas such as beach parks. Support the availability of adequate staffing and funding to enable this.
- Consider establishment of facilities which police officers could use as a local base of operations.
- Promote the creation of safe, crime-deterrent public and private environments by encouraging the use of crime-preventive principles in the planning and design of communities, open spaces, circulation networks, and buildings.

5. IMPLEMENTATION

Implementation of the City's revised Development and *Sustainable* Community Plans will be a major challenge for the City's planners, engineers, and other technical and policy-level personnel, as well as elected officials who determine the allocation of City resources. In contrast to previous Development Plans, which functioned primarily as regulatory guides and a prerequisite for City zoning of parcels proposed for development, the revised plans are oriented toward implementation on a broader scale. They now seek to implement a vision for the future by providing wider guidance for decisions and actions related to land use, public facilities, and infrastructure as well as for zoning matters. As a result, many of their provisions reflect the consultations which occurred throughout the planning process with pertinent implementing agencies and community representatives.

Many other city, county, and town jurisdictions on the U.S. mainland have instituted comprehensive planning programs that emphasize a proactive community-based planning and implementation process. These local governments seek to establish a strong link between planning policies and guidelines, and specific organization, funding, and actions needed to implement a variety of public and private projects and programs. The following sections of this chapter are intended to strengthen the linkage to implementation to realize the vision of the future presented in this plan.

Implementation of the North Shore Sustainable Communities Plan will be accomplished by:

- Initiating zoning map and development code amendments to achieve consistency with the policies, principles, and guidelines of the *Sustainable* Communities Plan;
- Guiding public investment in infrastructure through Functional Plans which support the vision of the *Sustainable* Communities Plan;
- Recommending approval, approval with modifications, or denial of developments seeking zoning and other development approvals based on how well they support the vision for the North Shore;
- Incorporating Sustainable Communities Plan priorities through the Public Infrastructure Map and the City's annual budget process; and
- Conducting a review of the vision, policies, principles, guidelines, and CIP priority investments of the North Shore Sustainable Communities Plan every five years and recommending revisions as necessary.

5.1 PUBLIC FACILITY INVESTMENT PRIORITIES

The vision for the North Shore requires the cooperation of both public and private agencies in planning, financing, and constructing infrastructure. The City must take an active role in

planning infrastructure improvements, including improvements for wastewater treatment, drainage, parks and public access, and roadways.

5.2 DEVELOPMENT PRIORITIES

Projects to receive priority in the approval process are those which:

- Involve land acquisition and improvements for public projects that are consistent with the Sustainable Communities Plan vision, general policies, and planning principles;
- Involve applications for zoning and other regulatory approvals which are consistent with the *Sustainable* Communities Plan vision, general policies, and planning principles; and
- Are located on vacant usable parcels and are consistent with the Sustainable Communities Plan Land Use Map in Appendix A.

5.3 SPECIAL AREA PLANS

For areas requiring particular attention, Special Area Plans provide more detailed policies, principles, and guidelines than the Development and *Sustainable* Communities Plans. The form and content of Special Area Plans depend on what characteristics and issues need to be addressed in greater detail in planning and guiding development or use of the Special Area.

Special Area Plans can be used to guide land use development and infrastructure investment in Special Districts, Redevelopment Districts, or Resource Areas. Plans for Special Districts would provide guidance for development and infrastructure investment in areas with distinct historic or design character or significant public views. Plans for Redevelopment Districts would provide strategies for the revitalization or redevelopment of an area. Plans for Resource Areas would provide resource management strategies for areas with particular natural or cultural resource values.

There are no Special Area Plans proposed in the North Shore *Sustainable* Communities Plan area. As stated earlier, it is not the intent of this *Sustainable* Communities Plan to establish a Special Design District for Waialua Town. However, Waialua residents have indicated the need to consider in the future a special area plan that will promote economic revitalization of Waialua Town.

5.4 FUNCTIONAL PLANNING

Functional planning is the process through which various City agencies determine needs, assign priorities, establish timing and phasing, and propose financing for projects within their areas of responsibility that will further the implementation of the vision articulated in the Development and *Sustainable* Communities Plans. This process may take a variety of forms, depending upon the missions of the various agencies involved, as well as upon requirements

imposed from outside the City structure, such as federal requirements for wastewater management planning. Typically, functional planning occurs as a continuous or iterative activity within each agency.

The functional planning process involves annual review of existing functional planning documents and programs by the City agencies responsible for developing and maintaining infrastructure and public facilities or for provision of City services. As a result of these reviews, the agencies then update, if required, existing plans or prepare new long-range functional planning documents that address facilities and service system needs. Updates of functional planning documents are also conducted to assure that agency plans will serve to further implement the Development and *Sustainable* Communities Plans well as to provide adequate opportunity for coordination of plans and programs among the various agencies.

The number and types of functional planning documents will vary from agency to agency, as will the emphases and contents of those documents. A typical agency may develop a set of core documents such as:

- A resource-constrained long-range capital improvement program. A "resource-constrained" program is one which identifies the fiscal resources that can be reasonably expected to be available to finance the improvements.
- A long-range financing plan, with identification of necessary new revenue measures or opportunities.
- A development schedule with top priorities for areas designated for earliest development.
- Service and facility design standards, including level of service guidelines for determining adequacy.

Other documents may also be developed as part of an agency's functional planning activities, such as master plans for provision of services to a specific region of the island. In some cases, functional planning activities will be undertaken in cooperation with agencies outside the City structure, such as the transportation planning activities that are conducted in association with the Oahu Metropolitan Planning Organization.

Functional planning is intended to be a proactive public involvement process which provides public access to information about infrastructure and public facility needs assessments, alternatives evaluations, and financing. Outreach activities should involve Neighborhood Boards, community organizations, landowners, and others who may be significantly affected by the public facilities and infrastructure projects or programs to be developed to further implement the policies of the Development and *Sustainable* Communities Plans.

The functional planning process should be characterized by opportunities for early and continuing involvement, timely public notice, public access to information used in the evaluation of priorities, and the opportunity to suggest alternatives and to express preferences. The

functional planning process provides the technical background for the Capital Improvement Program and public policy proposals which are subject to review and approval by the City Council.

5.5 REVIEW OF ZONING AND OTHER DEVELOPMENT APPLICATIONS

A primary way in which the vision of the North Shore Sustainable Communities Plan will guide land use is through the review of applications for zone changes and other development approvals. Approval for all development projects should be based on the extent to which the project supports the vision and policies, principles, and guidelines of the Sustainable Communities Plan.

Projects which do not involve significant zone changes will be reviewed by the Department of Planning and Permitting for consistency with the vision, policies, principles, and guidelines of the North Shore *Sustainable* Communities Plan during the Zone Change Application process. Those projects requiring environmental assessments shall follow the provisions of Hawaii Revised Statutes, Chapter 343. Projects involving significant zone changes will require an Environmental Assessment.

5.5.1 Adequate Facilities Requirement

All projects requesting zone changes shall be reviewed to determine if adequate public facilities and infrastructure will be available to meet the needs created as a result of the development. Level of Service Guidelines to define adequate public facilities and infrastructure requirements will be established during the Capital Improvement Program process.

In order to guide development and growth in an orderly manner as required by the City's General Plan, zoning and other development approvals for new developments should be approved only if the responsible City and State agencies indicate that adequate public facilities and utilities will be available at the time of occupancy, or if conditions the functional agency indicates are necessary to assure adequacy are otherwise sufficiently addressed.

The Department of Planning and Permitting will review the project for consistency with the North Shore *Sustainable* Communities Plan vision, and summarize any individual agency's findings regarding public facilities and utilities adequacy which are raised as part of the EA/EIS process. The Department will address these findings and any additional agency comments submitted as part of the agency review of the zone change application and recommend conditions that should be included in the Unilateral Agreement or Development Agreement to insure adequacy of facilities.

5.6 FIVE-YEAR SUSTAINABLE COMMUNITIES PLAN REVIEW

The Department of Planning and Permitting shall conduct a comprehensive review of the North Shore Sustainable Communities Plan and report its findings and recommended revisions to

North Shore Sustainable Communities Plan

Implementation

the Planning Commission and the City Council five years after adoption and every five years thereafter. It is intended that the Rural Community, Agriculture, and Preservation Boundaries will remain fixed through the 2020 planning horizon.

5.7 TRANSITION FROM THE CURRENT SYSTEM

This section discusses the transition from the former Development Plan to this *Sustainable* Communities Plan, including its independence from Development Plan Common Provisions, its relationship to the General Plan guidelines, and the need for review and revision of development codes, standards, and regulations.

5.7.1 Development Plan Common Provisions and Existing Land Use Approvals

This *Sustainable* Communities Plan will go into effect upon adoption by ordinance. At that time, the *Sustainable* Communities Plan will become a self-contained document, not reliant on the Development Plan Common Provisions which formerly applied to the North Shore Development Plan as well as all the other Development Plans.

Land use approvals granted under existing zoning, Unilateral Agreements, and approved Urban Design Plans will remain in force and guide entitlement decisions until any zoning action to further implement the vision and policies of the North Shore Sustainable Communities Plans initiated. If an Environmental Assessment or Environmental Impact Statement (EA/EIS) is accepted in the course of a Sustainable Communities Plan land use approval for a project, it should be acceptable to meet the requirement for an initial project EA/EIS when zone change applications are submitted for subsequent phases of the project, unless the project scope and land uses are being significantly changed from that described in the initial EA/EIS.

5.7.2 Relation to General Plan Population Guidelines

The North Shore Sustainable Communities Plan implements the General Plan population policies (in Population Objective C) as follows:

- North Shore's share of population in 2020 will be consistent with the current General Plan population distribution range.
- The recommended land use pattern also implements Population Objective C, Policy 3, which is to limit growth in areas outside the Primary Urban Center, Central Oahu, and Ewa so that the urban fringe and country character of these outlying areas can be maintained.

Under the new North Shore *Sustainable* Communities Plan, projects will be evaluated against how well they fulfill the vision for the North Shore set forth in the *Sustainable* Communities Plan and how closely they meet the policies, principles, and guidelines selected to implement the vision.

5.7.3 REVIEW AND REVISION OF DEVELOPMENT CODES

Upon completion of the *Sustainable* Communities Plan revision program, current regulatory codes and standards should be reviewed and revised, as necessary, to maintain their consistency and effectiveness as standards to guide attainment of the objectives and policies envisioned for all Development Plan or *Sustainable* Communities Plan areas. At the time such reviews are conducted, the following regulatory codes and standards may warrant further review and revision to ensure achievement of the vision for the North Shore region, as well as consistency with the North Shore *Sustainable* Communities Plan:

- Land Use Ordinance (Chapter 21, Revised Ordinances of Honolulu). Zoning code standards and the zoning map for the North Shore need to be revised to reflect policies, principles, and guidelines in the *Sustainable* Communities Plan.
- **Subdivision Rules and Regulations** (Department of Planning and Permitting, pursuant to Chapter 22, Revised Ordinances of Honolulu). Public right-of way standards used for subdivision and consolidation of land need to be revised to reflect transportation and rural community development policies, principles, and guidelines in the *Sustainable* Communities Plan.
- Traffic Standard Manual (Department of Transportation Services, July 1976, as revised). Standards which are applied to local and most collector streets need to be revised to reflect transportation policies, principles, and guidelines in the Sustainable Communities Plan.
- State Highways Division Procedures Manual, Vol. 8, Chapter 5, Section 4 (State Department of Transportation). These State highway standards need to be reviewed to identify provisions which may conflict with the transportation policies, principles, and guidelines in the Sustainable Communities Plan.
- Standard Details for Public Works Construction (Department of Planning and Permitting). Engineering standards for the dedication of public works construction need to be revised to reflect *Sustainable* Communities Plan principles and guidelines.
- **Storm Drainage Standards** (Department of Planning and Permitting). Standards for the dedication of drainage systems to incorporate grassed swales and retention basins into the design need to be created to reflect the *Sustainable* Communities Plan policies, principles, and guidelines for open space.
- Park Dedication Rules and Regulations (Department of Planning and Permitting, pursuant to Chapter 22, Article 7, Revised Ordinances of Honolulu). Regulations need to be reviewed to determine if passive drainage systems which are designed for recreational use could count toward park dedication requirements, especially in cases

where the area would exceed the amount of land that would be required under current rules and regulations, provided that it adequately serves the active recreational needs of the community and provided that the recreational uses and drainage function are compatible at the site.

 Wastewater Management Design Standards (Department of Design and Construction and the 1990 Revised Ordinances of Honolulu, Chapter 14, relating to sewer services). These standards and ordinances may require review to further implement Sustainable Communities Plan policies and guidelines, in accordance with established public health and safety standards.

APPENDIX A: OPEN SPACE, LAND USE, AND PUBLIC FACILITIES MAPS

The North Shore Sustainable Community Plan includes three colored maps:

- The Open Space Map
- The Land Use Map
- The Public Facilities Map

These maps illustrate the long-range Vision of the future of the plan area and the major land use, open space, and public facility policies that are articulated in the plan. In examining them, the reader should keep in mind that:

- These maps are general and conceptual.
- They are illustrative of the plan's policy statements, presented in the text of this report.

These policy statements, which appear in the preceding chapters, are considered to be the most important elements of the plan. The maps are considered illustrations of the policies. However, it is recognized that the maps may be more accessible and more interesting than the written policies. This section of the plan, therefore, presents a brief explanation of the contents of each of these maps.

Elements common to each of the three maps include organizing boundaries and four land use designations: "Preservation," "Agriculture," "Parks," and "Military." They are presented below. Common information particular to each map is presented under each map topic.

The maps which follow display Rural Community Boundaries, Agriculture Boundaries, and Preservation Boundaries. These maps are not parcel-specific, but illustrate generalized categories or groups of land uses within the region.

Because they are not parcel-specific, the lines depicted by these boundaries do not indicate precise or abrupt demarcations. Rather, the extent of permissible or appropriate uses within these boundaries should be evaluated and determined in concert with relevant sections of the plan's text and specific site characteristics. Summary descriptions of each boundary category follow below.

Rural Community Boundary

The rural community boundary defines, protects, and contains the intended extent of the "built-up" or "settled" areas of rural communities. Its purposes are to provide adequate lands to support established communities, to protect such communities from more intense form of development, and to protect lands outside the boundary for agriculture or other resource or open space values. Areas within this boundary characteristically consist of relatively small, dispersed residential communities and towns. In the North Shore Sustainable Communities

Plan, the Rural Community Boundary includes the built areas of Mokuleia, Waialua, Haleiwa, Kawailoa, Sunset/Pupukea, and the proposed Lihi Lani.

Agriculture Boundary

The agriculture boundary is to protect important agriculture lands for their economic and open space values, and for their value in helping to give a region its identifiable character. The boundary is not displayed as a discrete boundary on the Open Space, Land Use, and Public Facilities maps. It is implied, rather, by the agricultural land use designations outside the Rural Community Boundary. They include agriculturally important lands designated by ALISH as "prime," "unique," or "other."

Preservation Boundary

The primary purpose of Preservation boundaries is to protect lands which are not valued primarily for agriculture, but which form an important part of a region's open space fabric for their natural, cultural, or scenic resource values. The boundary generally circumscribes lands outside the Rural Community Boundary that are designated as Preservation on the Open Space, Land Use and Public Facilities Map.

Preservation

Preservation lands include those lands not valued primarily for agriculture, but which form an important part of a region's open space fabric. They possess natural, cultural, or scenic resource values, and include important wildlife habitat, cultural sites, significant landforms, views, or hazard areas. They include the following types of land:

- Land necessary for protecting watersheds, water resources and water supplies.
- Lands necessary for the conservation, preservation and enhancement of sites with scenic, historic, archaeologic or ecologic significance.
- Lands necessary for providing and preserving parklands, wilderness and beach reserves, and for conserving natural ecosystems of endemic plants, fish and wildlife, for forestry, and other related activities to these uses.
- Lands having an elevation below the maximum inland line of the zone of wave action, and marine waters, fishponds and tide pools of Oahu unless otherwise designated on the development plan land use map.
- All offshore and outlying islands of Oahu unless otherwise classified.
- Lands with topography, soils, climate or other related environmental factors that may not be normally adaptable or presently needed for urban, rural or agricultural use.

- Lands with general slopes of 20 percent or more which provide for open space amenities and/or scenic values.
- Lands susceptible to floods and soil erosion, lands undergoing major erosion damage and requiring corrective attention by the State or Federal Government, and lands necessary to the protection of the health, safety and welfare of the public by reason of soil instability or the lands' susceptibility to landslides and/or inundation by tsunami and flooding.
- Lands used for national, state or city parks.
- Lands suitable for growing of commercial timber, grazing, hunting, and recreation uses, including facilities accessory to such uses when said facilities are compatible with the natural physical environment.

Agriculture

Lands with agricultural value by virtue of current agricultural use or high value for future agricultural use, including those areas identified as Prime, Unique, or Other Important lands on the Agricultural Lands Important to the State of Hawaii (ALISH) maps. "Agriculture" includes lands suitable for crop growing, grazing and livestock raising, flower cultivation, nurseries, orchards, aquaculture, or similar activities.

Parks

Public and private parks and recreational facilities, including beach parks, playgrounds, playfields, district parks, botanical gardens, zoos, and golf courses.

Military

Lands for military and military support purposes.

OPEN SPACE MAP

The Open Space Map is intended to illustrate the region's major open space patterns and resources as outlined in Chapter 3. It highlights major open space elements and resources, including agricultural and preservation lands, major parks, important "panoramic" views, natural stream corridors and drainageways, and rural communities within the Rural Community Boundary.

LAND USE MAP

This map illustrates the desired long-range land use pattern for the North Shore Sustainable Communities Plan Region. It supports the plan's vision and policies. The map includes the following terms:

Rural

Single-family homes on large lots. On-site development is characteristically low-intensity, typically consisting of single-family detached home, ancillary structures, if necessary, low site coverage, nonurban development standards, and a large predominance of landscaped open space.

Rural Residential

Single-family homes in country settings on medium-sized to large lots, on which rural development standards are employed and provisions for pedestrian circulation, landscaping, and open space are emphasized. "Rural Residential" also includes minor pockets of existing apartment areas in Mokuleia. These apartment lands are not mapped but are cited and elaborated in the text.

Rural Community Commercial Center

A small cluster of small-scale, low-rise commercial and service businesses which serve primarily the immediate community. Its primary visual appearance is rural. Buildings are generally compatible in scale and form with adjacent residential areas.

Country Town

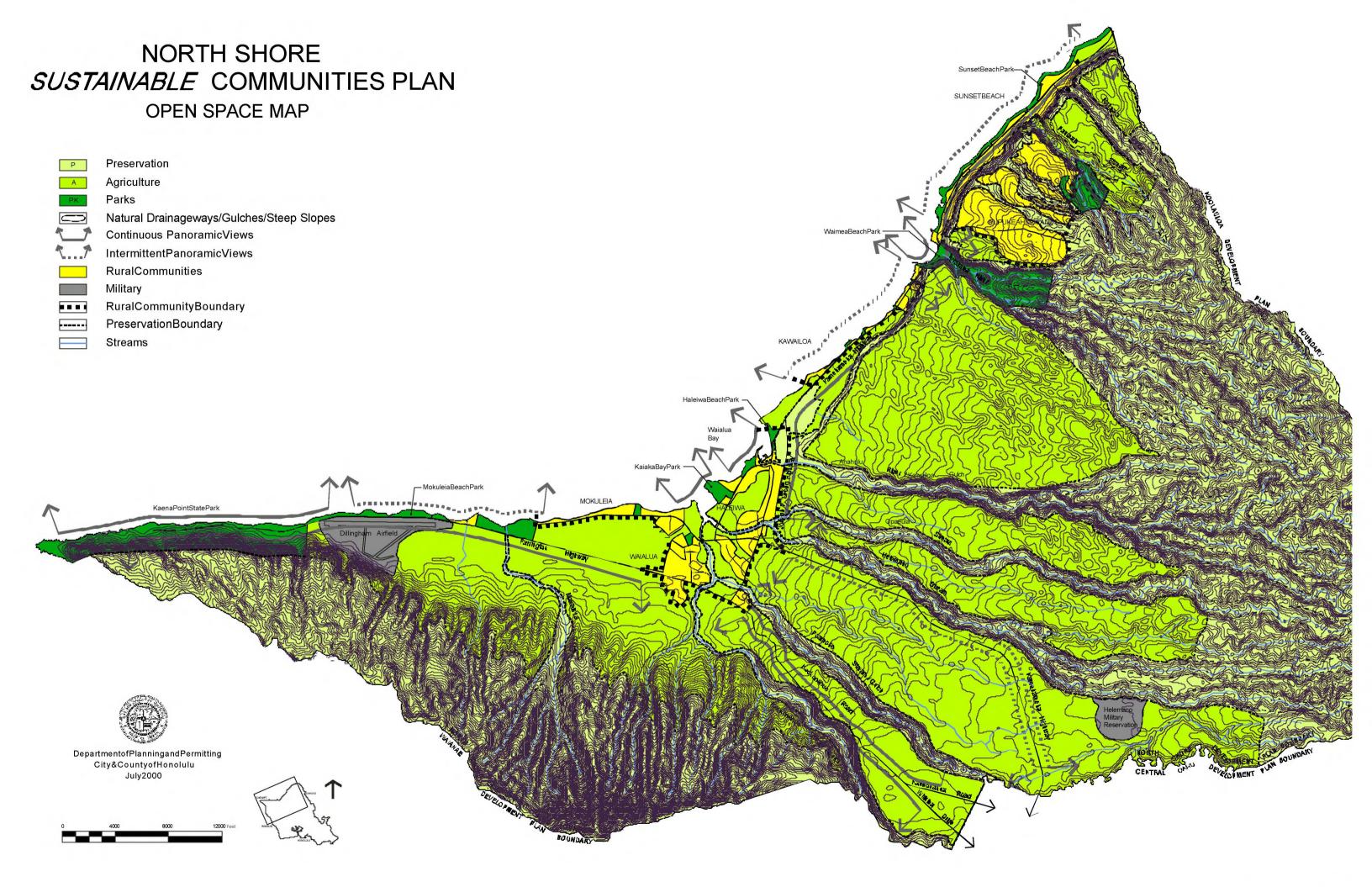
A small-scale, low-rise, mixed-use center of commerce and community activity in rural character and setting in which principal establishments are oriented to the street. Land use mixtures may include retail, office, and dining establishments, compatible service businesses and light industry, and residential uses. Commercial activity is concentrated along street frontages in typically "Mainstreet" settings.

Industrial

Facilities for processing, construction, manufacturing, transportation, wholesaling, storage, or similar economic activities, and accessory or supporting facilities which directly enhance their viability.

PUBLIC FACILITIES MAP

The Public Facilities Map illustrates major existing and future public facilities and privately owned facilities for public use. Its purpose is to display the public resources or assets available in the region. When the plan is adopted, a separate "Public Infrastructure Map," which will focus on and display facilities eligible for City Capital Improvements Program funding, will also be developed. For the North Shore region, the following types of facilities are displayed: wastewater treatment facilities and refuse transfer stations; elementary schools and intermediate and high schools; boat harbor and airfield; highways, arterial and collector streets, and bikeways; and agricultural support areas.



NORTH SHORE SUSTAINABLE COMMUNITIES PLAN SUNSETBEACH LAND USE MAP **EXISTING FUTURE** Preservation ■ WasteWaterTreatmentPlant Agriculture RefuseTransferStation Park Rural ElementarySchool RuralResidential 含 RuralCommunityCommercialCenter Intermediate&HighSchool CountryTown SmallBoatHarbor Industrial Military Airfield RuralCommunityBoundary AgricultureSupport PreservationBoundary Streams Highways, Arterial & Collector Streets KaiakaBayPark MOKULEIA KaenaPointStatePark DepartmentofPlanningandPermitting City&CountyofHonolulu July2000

NORTH SHORE SunsetBeachPark SUSTAINABLE COMMUNITIES PLAN SUNSETBEACH **PUBLIC FACILITIES MAP EXISTING FUTURE/IMPROVEMENTS** Preservation ■ WasteWaterTreatmentPlant Agriculture RuralCommunities RefuseTransferStation Parks ElementarySchool Military RuralCommunityBoundary Intermediate&HighSchool 窜 PreservationBoundary lacksquareStreams Small BoatHarbor Airfield AgricultureSupport Highways, Arterial & Collector Streets (Improvements) Bikeways MOKULEIA KaenaPointStatePark DepartmentofPlanningandPermitting City&CountyofHonolulu July2000